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CORPORATION BONDS (CONTINUED) *(Cont.)*

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The authors assume responsibility, however, for the points of view expressed and for possible deficiencies and errors.

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PREFACE

RECENT years have seen a large growth in the literature of corporation finance. A considerable portion has been in the form of textbooks, a number of which have been important and valuable contributions. But experience in teaching classes of both college students and businessmen in this subject has led to the preparation of a book which is aimed more directly at the solution of problems of financial policy. This emphasis upon what is essentially the management point of view explains the inclusion of considerable material on current practice, which is correlated at each point with underlying principles. Only by understanding the reasons that lie behind practice can management decide upon the correct course of action under the varying conditions of business. Moreover, financial policy often requires a synthesis of these principles with pertinent points of law, accounting, and economics. An attempt is made to introduce essential information as the need arises in the discussion.

When this book is used as a text in an extensive college course, the instructor will find references to additional reading in the footnotes and in the selected reference list following the last chapter. Such sources can be used to expand the topics which the instructor feels deserve more emphasis. The businessman or lawyer will find that these references often cover technical matter of value in solving problems. When a shorter text is desired, the instructor will find that certain secondary subjects have been segregated into separate chapters (such as Chapters 15, 17, and 29) , which can be readily omitted without loss of continuity. The outline form of the table of contents should make it easier for the instructor to plan the most effective course to meet his particular situation and should also help the student in his organization of the subject matter.

In view of the increasing debate in both the academic and the political fields on the social aspects of finance, the concluding chapter on that topic should be a welcome addition to the conventional subject matter. Many will undoubtedly wish to pursue this subject further through the suggested readings.

The authors are indebted to those who have read all or parts of the book in its preliminary form, and whose friendly criticisms and suggestions have contributed much to its improvement. Among those who have been good enough to help are David D. Dillman,

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CORPORATE FINANCIAL POLICY

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CHAPTER 1

THE FIELD OF CORPORATION FINANCE

AS THE man of affairs surveys the field of business endeavor, probably no aspect holds more allurement than that of finance. The language of finance—with its stock and bonds, notes and drafts, profits and dividends—has a golden suggestiveness which is closely associated with affluence and prestige. The financier is thought of as the controller of the money bags of industry. Finance, broadly speaking, is concerned with the moneyed aspect of both governmental and private activities. So the first task is to indicate what material shall be included in this discussion of the branch of that subject conventionally called *corporation finance.*

Definition of the field. Today business property is held largely by great impersonal units known as *corporations,* most of whose permanent funds are the contributions of bondholders and stockholders. That branch of finance called *corporation finance* has by an arbitrary convention come to cover, in the words of the Education Committee of the Investment Bankers Association, "the financing of the relatively fixed capital of private business corporations." [1]

Consequently the subject is conventionally concerned largely with stocks and bonds, the instruments which serve as the connecting financial link between industry, as represented by the corporation, and those who have their property accumulations in this form. Actually, our treatment of the subject is somewhat broader than this definition would indicate. As later discussion will show, related matters such as short-term financing through commercial banks and merchants and control of the internal finances of the corporation are covered briefly. But a lengthy discussion of such subjects seems undesirable, partly because the length of the volume should be kept within reasonable limits, and partly because the material is covered in other courses given at the collegiate level.

Since definition is usually a hopelessly abstract and thankless task when employed in the introduction to a subject, a statement of the subject matter to be included and excluded may better serve

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[1] The Investment Bankers Association of America, *Courses of Study in Corporation Finance and Investment* (New York: Doubleday, Doran & Co., 1917), p. 4.

to clarify the place of corporation finance in the field of business literature:

1. Only *private, profit-seeking* business will be considered, to the exclusion of *public,* or governmental, enterprise. The latter field is of great importance to the investing public and represents a competing factor for the funds of the investing public. At an earlier time public finance was more important than corporate finance, but, with the rise of large-scale industry, it has shrunk in relative significance. Large enterprises such as railroads, electric power developments, docks, waterworks, and even banks offered very uncertain hopes of profit in their early stages but were essential to the development of the wealth of the community and therefore were often financed from the public treasury. This is still the case with many of the younger countries, such as those in South America. Since 1932 a remarkable expansion in governmental financing of private business has taken place in the 'United States.

2. Primary emphasis will be placed upon how private business *acquires* the funds or property with which it operates. In general, the acquisition of funds is the problem of selling securities—that is, stocks and bonds—for the cash needed to purchase the desired assets. Securities may, however, be issued directly for property, as in the case of a consolidation with another corporation.

3. Our predominant concern is with the sources of *more permanent* types of capital supply—namely, stocks and bonds—as opposed to such *temporary* supplies as are to be had through bank loans and trade credits from merchants and manufacturers. Practically it becomes necessary to give some consideration to the latter kinds of financial assistance. In the first place their use diminishes the need for permanent financing and so creates the problem of deciding the proper balance among the several channels for obtaining funds. In the second place sound financial planning requires the treatment of the financing problem as a complete whole, and the principles developed in the course of our study necessarily take into consideration all of the financing, both permanent and temporary.

4. The use of the funds obtained is the general managerial problem of operating the business rather than a financial problem, and so the topic is necessarily omitted, save as the control of business operations reaches and touches the work of external financing. Accounting and statistics are the *techniques* for recording and reporting the operations, and their proper utilization is a matter of prime importance for those who conduct the financing, but they constitute distinct branches in the art of business and can be considered only briefly in any work on corporation finance. Consequently our subject has in general come to exclude *internal* finan-

cial problems, although some place must be given to the discussion of such major internal problems as budgetary control because of their large importance in external financial relationships. [2]

5. The sale of securities to the investing public implies the subsequent payment of a return in the form of interest or dividends. For that reason, the *management of the corporate net income,* one phase of internal financial management, necessarily comes within the scope of our subject. An ever-important problem of financial management is to decide how net income shall be used to the best advantage. The alternatives, save where specific contracts limit the freedom of management, are to distribute dividends, to add to the properties of the business, or to retire outstanding securities.

6. Finally, the form of capital structure may be altered. The change may be a voluntary process designed to improve the financial standing of the corporation, or it may be a forced reorganization brought about by *financial embarrassment or failure.*

Historical setting of the subject. These corporate problems are distinctly modern and belong peculiarly to our capitalistic machine age. Before the Industrial Revolution wealth lay largely in the control of land and was closely associated with political rank and influence, as in the feudal system. Even after the advent of the machine, business units were usually small and were the shadows of one man or at most a small number of men. Only as the unit grew in size and took on a life and personality of its own did it become important in its own right, living on from generation to generation like an industrial principality. The huge corporate organization became a thing with a life of its own even though its health and fortunes were dependent upon the capacity of the persons who gave it leadership. In present-day society, position and prestige are not so often a matter of political as of economic rank. The dukes and barons of old find their modern prototypes in the captains of industry who own and guide the destinies of railroads, electric power systems, banks, factories, and merchandising organizations. Today in industrially developed countries without the democratic form of government those with rank and title are often the mere façade, the showy front, of power. The real direction of affairs often lies in the hands of those who control the operation of these new kingdoms of a capitalistic society which are organized as business corporations.

The evolution of this new industrial society not only makes a f as-

[2] For the exceptional treatment laying primary emphasis on internal financial problems, see J. O. McKinsey and S. P. Meech, *Controlling the Finances of a Business* (New York: Ronald Press Co., 1923), and W. M. Stevens, *Financial Organization and Administration* (New York: American Book Co., 1934). The latter deviates from the more orthodox texts in corporation finance in that almost half of its contents is devoted to internal financial administration.

cinating story but, properly understood, also throws light upon the inner meaning of many of the corporate devices which will be studied here. Although economic history cannot be stressed in this book, it may be said that in the story of the growth of large-scale industry lies the explanation for the downright necessity for some type of impersonal organization such as the corporation. The corporation has proved a flexible and valuable instrument. Through it_are joined the venturesome and the cautious, the wealthy and the penniless, the capable and the unskillful, and the energetic young

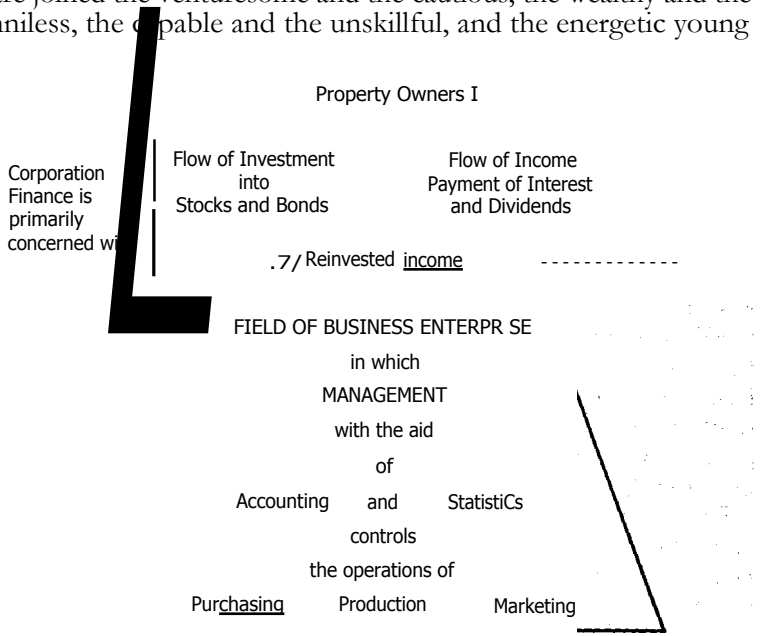

Figure 1. Position of Corporation Finance in Relation to the Field of Business Enterprise.

and the retiring old into a system of contractual relationships which made it possible for each to take his most fitting part in those gigantic business enterprises which stretch across continents and over seas.

place of finance in business. Finance is concerned with the raising and administering of funds and with the relationships between private profit-seeking enterprise on the one hand and the groups which supply the funds on the other. These groups, which include investors and speculators—that is, capitalists or property owners—as well as those who advance short-term capital, place their money in the field of commerce and industry and in return expect a. stream of income. This relationship is illustrated graphically in Figure 1, which also indicates the major operations or functions

of business which give rise to the need for capital. The chart shows corporation finance concerned primarily with the relations between the property owners who invest in the stocks and bonds of corporations and receive interest and dividends in turn. Some income is short-circuited and is retained for the purposes of the enterprise, so that it fails to reach the security holders. Since the purpose of this chart is merely to indicate the position of our subject, no elaborate picture of the internal organization is necessary here. Management is shown as at the top of the truncated pyramid of organization. It exercises control over the three operating divisions of purchasing, production or manufacturing, and marketing. Effective management requires adequate information for its work, and so accounting and statistics are means of control designed to provide such information on operations.

The chart is chiefly deficient in omitting reference to the sources of short-term funds and in not indicating the relation to the Government. Short-term finance, as has been pointed out, is given a minor place in our discussion. Governmental activities, likewise, can be given only incidental treatment. Regulation represents the Government's direction and limitation of the managerial function; taxation is the collection of revenue by the Government from business. Both will receive attention in these pages in so far as they influence financial policy. Their importance has grown so greatly in recent years as to make them paramount considerations in shaping policy.

Such a generalized picture of business must of necessity be inaccurate at some points. Manufacturing best illustrates an economic process in which purchased materials are converted by the processes of production for distribution to the public by the marketing division. In merchandising, where the service rendered to the public is that of bringing goods to places (place utility) at times (time utility) convenient to the buying public, there is no production division. In the case of mining, the purchasing division is practically nonexistent save for minor supplies, since the raw material, in the form of ores, is obtained directly from the mine Again the service-rendering utilities, such as the railroad, do not appear to have the same departmentalization of purchasing, production, and marketing as do the goods-producing manufacturers. However, they do have what amounts to production problems in their purchase of fuel and labor to perform their service-rendering functions. The marketing, or selling, division of the railroad is clearly indicated as a distinct department by the segregation of its expenses, in financial reports, under the heading of "Traffic Expenses," meaning expenditures to obtain traffic. However, our main concern at this point is with the place of corporation finance in busi-

ness, and a very scant picture of business operations is sufficient.

The managements of "business corporations"—that is, companies engaged in the production, manufacturing or processing, and selling of goods and services—as contrasted with the "financial corporations," such as banks and insurance companies, are not primarily concerned with financial problems. The raising and administering of funds is usually only incidental to their main activities (although there are occasions when financial problems loom largest in the minds of management). Nevertheless, to carry on those activities, money is required. Problems of finance are therefore intimately connected with problems of purchasing, production, and marketing. Indeed, it is difficult to isolate questions of finance from the problems of management concerned with the major operations of business. Furthermore, the success or failure of the management in performing these major or basic functions is reflected in the financial condition of the business.

Finance, law, and accounting. Just as problems of financing are intimately connected with problems of operation, so the subject of finance is interrelated with such subjects or fields of study as law and accounting. The corporation is a creature of the state, and its functioning is hedged about by a mass of legal restrictions. Decisions involving financial policy must always be considered with respect to their legality as well as to their expediency. For example, when the directors of a company meet to decide on the question of the amount and type of dividends to be declared, their decision is affected by the legal status of the proposed action as well as by its economic and financial justification. Our discussion of financial policy, therefore, involves us in frequent allusions to the legal aspects of business.

Finance and accounting are likewise closely interrelated. The accountant prepares statements which indicate the financial condition and trend of the business and reflect the decisions made by the management. Sound finance is thus often a matter of good accounting. Therefore our discussion of corporate financial policy must give particular attention to the procedures which the accountant uses in determining the financial condition of the business and to the restrictions which sound accounting imposes upon those in charge of financial policies.

Charting the course of study. After the place of our subject in the field of business is defined, the problem of charting our course of action in the coming chapters faces us. The most vivid and realistic attack would seem to follow the normal life history of the corporation itself, to see its financing problems as a new promotion, then as an established growing organization, and finally, should it reach that unhappy stage, as a sick or dying business unit. Pre-

liminary to this tale of the financial life cycle of the corporation it is desirable to study the following:

First, the nature of the business corporation itself and its advantages and disadvantages as a form of organization in comparison with alternative forms, such as the partnership and the business trust.

Second, the devices and methods by which the corporation is organized, managed, and controlled.

Third, the character of the two types of financial instruments, bonds and stocks, which the corporation employs to raise much of its resources. After the description of these two instruments of finance, there follows a chapter dealing with the general principles of their use.

When these preliminaries have been covered, we are ready to proceed with the leading financial questions and problems which arise during the life history of the corporation. The factors determining the form of the capital structure and the devices by which funds are raised are first considered with respect to the newly promoted enterprise. Once established, the enterprise requires continued financing. The financial plans and practices of the major types of business enterprises—industrials, utilities, and railroads—are therefore considered next.

The question of raising funds through the sale of securities is particularly important, and the next group of topics considered includes the sale of securities to outsiders through the investment banker, and to persons already interested in the business, such as stockholders, employees, and customers. Since the stock market may have an important bearing on the sale of securities and on the financial practices of the corporation, its place in the work of financing is discussed along with the preceding topics.

Problems of financing the current operations of the business, as contrasted with those of "long-term," or capital, financing, demand the constant attention of business management. To round out the picture at this point it is necessary to discuss these problems and to canvass the sources of the current funds which are used to supplement the more permanent contributions of bondholders and stockholders.

The business corporation is promoted and operated primarily for profit. This profit, or net income, is in a very real sense "managed" and even partially determined by management rather than being the automatic result of operations. Problems involved in the management of net income and in the dividend policies of the business become particularly significant when much of the funds employed in the business have been secured through the issuance

of securities to the public. Income may be employed to expand operations or to reduce outstanding securities, or it may be distributed among the security holders Important questions of expediency and fairness, as well as of conformity to law and to accepted accounting practice, are constantly arising.

The corporations commanding the most social and financial attention today are the large corporations, or the corporate groups which have emerged as a result of the use of various methods of combination, both formal and informal. The student of modern finance must therefore devote particular attention to the problems arising out of increasing size and to the techniques used to create the great corporate groups which dominate our present-day industrial scene. Following a general discussion of corporate expansion and combination, the use of various techniques of combination, in particular the more formal types such as the lease, merger and consolidation, and the holding company, is presented in some detail, with emphasis on the effects of these methods on the security holders of the companies concerned.

Many corporations experience financial troubles at one time or another. The trouble may be mild or serious. An important section of our subject, then, is concerned with readjustment of companies suffering from poor financial health. The treatments range from simple adjustments, accomplished by voluntary action, to major operations involving drastic corporate reorganizations. Here again the part played by the public, through legislation and court action, is emphasized along with the effects of readjustment on management and stockholders.

But no course of treatment suffices to preserve the solvency and continued operation of the large number of concerns which pass out of existence each year through voluntary or forced liquidation. The processes, both formal and informal, by which corporate dissolution and liquidation are carried out and the effect of those processes on the parties and groups concerned constitutes the final chapter in the financial life history of the corporation. A concluding chapter discusses some of the major social problems that arise out of corporate finance.

Uses of the subject matter. The foregoing description of the subject matter of corporation finance suggests its uses. For business management the subject is clearly of first importance and will necessarily remain important as long as it is necessary to obtain business funds from private owners. Management is obliged to regard itself as primarily responsible to the owners of the business. The most important single test of managerial performance will be found in the adequacy, regularity, and growth of the net income in relation to the total investment involved. Furthermore, the

problem of financing creates limitations to expansion and improvement.

Investment bankers, who perform the function of distributing securities, likewise have an important interest in the subject. Since they are security merchants, the study of corporation finance is a study of the conditions that surround their merchandise. The subject is hardly of less interest to the multitude of American investors. What they may lack in constant interest they make up for in numbers. As long as corporation securities occupy their present dominant position as channels for investment, a knowledge of corporation finance will be a basis for any genuinely sound approach to the study of investment.

And, finally, for all those persons who have an interest in the operation of our economic society, the financial side of the business mechanism, with all the attendant problems of ownership, control, and distribution of income, is of basic importance. Economists, sociologists, and students of politics must all be familiar with the machinery of corporation finance if they are to be more than dilettante in their analysis of present-day social problems as they are affected by property, chiefly corporate property, which constitutes empire and social power in our current capitalistic regime.

CHAPTER 2

LEGAL FORMS OF BUSINESS ORGANIZATION: THE SOLE PROPRIETORSHIP, THE GENERAL PARTNERSHIP, AND THE CORPORATION

Importance of the Corporation

Use of the corporation and other forms. The business significance of the corporation as a form of organization can best be appreciated by contrasting its characteristics with those of other forms. Three forms are chiefly used in this country—the sole proprietorship, the general partnership, and the corporation. Other forms, which are used relatively little, are the business trust, the joint-stock company, the limited partnership, the joint adventure, the limited partnership association, and the mining partnership. The census figures for 1919 showed slightly under one half of all *manufacturing* establishments individually owned, slightly under one third organized as corporations, and about one fifth em-

TABLE 1

COMPARATIVE IMPORTANCE OF CORPORATE FORM OF ORGANIZATION

Manufacturing Establishments

		Corporations		*Other Organizations*		*Total*
		Amount	*Per Cent*	*Amount*	*Per Cent*	*Amount*
Number of establishments:	1929	101,815	48	109,144	52	210,959
	1919	91,517	32	198,588	68	290,105
Number of wage earners:	1929	7,945,478	90	893,265	10	8,838,743
(average for year)	1919	7,875,132	87	1,221,240	13	9,096,372
Value of product:	1929	$64,901	92	$5,534	8	$70,435
(millions of dollars)	1919	54,744	88	7,674	12	62,418

Source: U. S. Department of Commerce, Bureau of the Census, *Fifteenth Census of the United States,* 1930. Manufactures, 1929, Vol. 1, p. 95, Table 2, "Type of Ownership and Type of Operation." Forms of organization other than corporate were not reported in the 1929 census.

ploying some other form.' The similar figures for 1929, shown in Table 1, group all forms of organization other than the corporation together. While the number of business corporations grew 11 per cent during the decade 1919 to 1929, the number of other forms of organization declined 45 per cent, so that there were almost as many corporations as all other forms of organization combined,

When the greater average size of the units conducted as corporations is noted, the dominant position of the corporate form of or-

TABLE 2

COMPARATIVE IMPORTANCE OF CORPORATE FORM OF ORGANIZATION
Wholesale and Retail Establishments

	Corporations		*Other Organizations*		*Total*
	Amount	*Per Cent*	*Amount*	*Per Cent*	*Amount*
Number of establishments:					
Wholesale	89,266	53	80,436	47	169,702
Retail	242,182	16	1,300,976	84	1,543,158
Number of full-time employees:					
Wholesale	1,286,848	80	318,197	20	1,605,042
Retail	2,043,076	53	1,790,505	47	3,833,581
Net sales (millions of dollars)!					
Wholesale	$51,416	74	17,876	26	$69,292
Retail	23,157	47	25,988	53	49,145

Source: U. S. Department of Commerce, Bureau of the Census, *Fifteenth Census of the United States,* 1930. Distribution, Vol. I, Retail Distribution, p. 89, Table 12A, and Vol. II, Wholesale Distribution, p. 92, Table 8.

ganization becomes apparent. While only 48 per cent of these manufacturing units were corporations in 1929, they nevertheless employed 90 per cent of the wage earners in manufacturing, and the value of their products was 92 per cent of the total figure. Each census shows corporations growing in numbers and in relative importance.

In most other fields of business, as well as in manufacturing, the corporate form is of leading importance, save in agriculture and the personal services. In merchandising, the chain store, using the corporate form, has displaced many individual proprietors and rendered precarious the positions of many others. In the financial field, banks and insurance companies are usually required to incorporate. The public service businesses—the steam railroad, the telephone company, the electric power company, the gas company, the water company, and the traction company—all are

1 U. S. Department of Commerce, Bureau of the Census, *Fourteenth Census of the United States,* 1920. Manufactures, 1919, Vol. 8, p. 119, Table 26, "Character of Ownership."

invariably incorporated except where they are governmentally owned.

The importance of the corporation in the wholesale and retail fields is indicated by the data shown in Table 2 for 1929.

The importance of the corporation explains why the subject of business finance is so largely a matter of studying the financing of corporations. An analysis of the comparative business merits of the various forms of organization in this and the following chapters will bring out the reasons for the widespread use of the corporate form whenever a need for raising considerable funds from the public exists. At the same time the disadvantages, particularly that of taxation, will be made clear. Strong reasons make the incorporation of small business units inadvisable as long as they lack any compelling financial reason for that step.

Choosing the Form of Organization

Characteristics that decide the form of organization. Sometimes the form of organization is a matter of legal compulsion, as when a state requires the incorporation of all commercial banks in order to facilitate regulation, or when it forbids incorporation, as in New York, in the case of law, medicine, and dentistry, insisting that the client or patient come into direct contact with the person who assumes professional responsibility. In the main, however, the business advantages of the particular form of organization, as they are seen by the management, determine its selection.

The more important points to be considered are the following:

1. Liability of owners for debts of the business.
2. Credit standing.
3. Permanence of the organization.
4. Ease in transferring ownership interests.
5. Ease in raising capital.
6 Expense and difficulty of starting.
7. Ease in functionalizing management.
8. Freedom from regulation.
9. Taxation.

In the following comparison the revealing note of difference will be found in the peculiar character of the corporation as an artificial personality. The corporation is something more than a mere form or way of doing business. It is a child of the state and possesses a legal personality which enables it through its agents or representatives to do many of the things which a natural person does. The people who organize the corporation are not the corporation but owners of it, somewhat in the way in which a slave would belong to his master. Property turned over to or. acquired

by the corporation does not belong to the owners of the corporation but to the corporation itself. Because the corporation is an' artificial person created by the state, its whole character depends upon the grant of life which it receives from the state and upon such legislation and law as may have grown up in the jurisdiction in which it was chartered. The classical definition of Chief Justice John Marshall (1819), containing this essential and illuminating idea, reads:

> A corporation is an artificial being, invisible, intangible, and existing only in contemplation of law. Being the mere creature of law, it possesses only those properties which the charter of its creation confers upon it, either expressly or as incidental to its very existence. These are such as are supposed best calculated to effect the object for which it was created. Among the most important are immortality, and, if the expression may be allowed, individuality; properties by which a perpetual succession of many persons are considered as the same and may act as a single individual. They enable a corporation to manage its own affairs, and to hold property without the perplexing intricacies, the hazardous and endless necessity of perpetual conveyances for the purpose of transmitting it from hand to hand. It is chiefly for the purpose of clothing bodies of men, in succession, with these qualities and capacities that corporations were invented, and are in use. By these means a perpetual succession of individuals are capable of acting for the promotion of the particular object, like one immortal being. [Dartmouth College v. Woodward, 4 Wheaton (U. S.) 518 (1819)1.

1. *_Liability of owners for business debts.* The distinction between the corporation, with its own individual personality, and the sole proprietorship or partnership, which are identified with the owner or owners, is clearly seen in connection with this first point. (Sole proprietorship means ownership by a single individual who contributes all the ownership funds, takes all the gains, and bears all the losses, and whose full liability to creditors means that they must be paid in full as long as he has any property left. The liability of partners is discussed below.) Under usual circumstances the corporation's creditors can find satisfaction for their claims only in such property as the corporation may own. Property of a proprietor or a partner, on the other hand, may at any time be levied upon regardless of whether it is among the business assets or the owner's personal assets.

In the case of an individual most of whose capital is used in an enterprise in which he is the active, directing force, this hazard may not constitute a serious objection to the sole proprietorship. Usually, when the business is young and its credit is precarious, the owner will find it necessary to invest all that he has in the business. Only as the business prospers and so greatly reduces the risk of a failure that will consume more than the business assets is the average owner likely to be able to make outside investments. Only when the individual of some means engages in a hazardous

line or has many ventures and wishes to limit his loss in a particular venture will he desire the protection from unlimited liability which comes with incorporation of a particular branch of his a ctiviti es.[2]

The burden of unlimited liability for business debts becomes more serious when there are two or more co-owners, as in the partnership form of organization. The disadvantage is most keenly felt as the number of partners increases and when the personal fortune of a particular partner is large in proportion to his business investment. A partner with personal assets of a hundred thousand dollars might well hesitate to risk them all upon the fortunes of a business in which he has but a five-thousand-dollar stake. A partner of some personal means must consider the possibility that business liabilities may be incurred in excess of the liquidating value of the assets. In addition to the ordinary risks of business, unusual debts may be incurred by an upscrupulous or improvident partner, or because of some accident to the public or a customer not covered by insurance, or through litigation, as over a patent.

Certain principles governing the liability relationships among creditors and partners, in their several relationships, may be stated here in summary form: [a]

(a) All of the property of a general partner is subject to unlimited liability for any of the partnership debts.[4]

(b) Even though the partnership assets are entirely adequate, a creditor may levy, if he chooses, on the assets of any individual partner, subject to the rule of marshaling of assets. This rule provides that, in case a question of precedence arises among business and personal creditors, partnership creditors shall have first claim upon the business (partnership) assets, and personal creditors shall have first claim upon the separate personal estate of the particular debtor; thereafter any unpaid partnership creditors may levy upon the personal estate of any partner if a balance over personal debts remains, and any unpaid personal creditor may levy upon any balance which the individual partner may have left in the business. This right of partnership creditors to seize satisfaction from whatever partner has the means, subject only to the rule

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In theory only a group of persons may incorporate. Actually, by associating the necessary number .of other persons as incorporators and directors with purely nominal investment and powers, the individual is able to obtain the desired end. Such nominally interested persons are referred to as "dummies ..

'In this discussion the Uniform Partnership Act, now adopted by eighteen states, is followed.

Certain modest exemptions, such as an artisan's tools, certain farm animals, some personal possessions, and sometimes homesteads, are allowed under the various state laws and recognized by the Federal Bankruptcy Act.

of marshaling, makes for what is known as "joint and several" liability with respect to the debts of the partnership. Partners are jointly liable in that they agree to share liability in certain proportions; they are severally liable in that the business creditors may actually collect all of a debt from any one partner if they choose, although action must be brought against all the partners.

Since the principle of marshaling creditors' claims sometimes appears difficult in application, an illustration may be helpful. Three partners, *A, B,* and *C,* have a business with assets of $500,000 and business liabilities of $280,000 prior to insolvency (inability to meet debts as they come due). In the ensuing liquidation the assets liquidate for only $250,000, leaving a loss of the same amount, which is divided among the partners in their agreed profit-and-loss-sharing ratio of two fifths, two fifths, and one-fifth. (In the absence of any agreement, these liquidation losses, like any other losses, would be divided equally among the partners regardless of capital contributions.) The result, as it appears in the accounts, is shown in the following table, which also shows the partners' personal assets at liquidating value and their personal debts.

	Original Business Equity	*Liquidation Loss*	*Final Business Equity*	*Personal Assets*	*Personal Debts*
A	$100,000	$100,000	0	$40,000	$2,000
B	80,000	100,000	$ —20,000	4,000	3,000
C	40,000	50,000	—10,000	2,000	4,000
	$220,000	$250,000	$ —30,000		

If the business (partnership) and personal creditors are each given first claim against the respective assets involved, the result will be as follows:

To business creditors . . . . $250,000 ($500,000 total assets less loss in liquidation of $250,000)

To personal creditors:

Of A ..... $2,000 in full
Of *B* ..... $3,000 in full
Of *C* ..... $2,000 to extent of personal assets

Balance of *A's* personal assets, $38,000; *B's,* $1,000; total, $39,000.

Since the business creditors were able to collect only $250,000 from the business on their total claims of $280,000, they have a claim against the partners' personal assets for the difference.

Under the joint and several liability feature, the business creditors may collect from any of the several partners who show a balance of assets after payment of personal debts. Thus, in this case they might collect all of their deficiency of $30,000 from *A,* who had net personal assets of $38,000. The third column of figures, show-

ing the net balance in the partnership accounts, indicates that this $30,000 should have been contributed by. *B* and *C* from their personal assets in the amounts of $20,000 and $10,000, respectively. Whenever a partner, like *A,* contributes from personal assets for business debts, he will have a claim for the amount against the deficient partners. In this case, if he paid the full $30,000 deficiency, he could collect only the $1,000 which *B* had in surplus personal assets and which he owed for his deficiency.

Since *C* has no equity left in the business after liquidation losses, his deficiency balance being $10,000, his personal creditors suffer a loss to the extent that *C's* personal assets do not satisfy their claims. If C had had a credit balance in the business, these personal creditors would have had a claim ranking after the partnership creditors. Such a claim would have value only when there was a balance left after the partnership creditors were paid in full, or where there was a collectible claim against some other partner for a deficiency balance not canceled by his paying partnership debts unsatisfied by the business assets.

(c) Any partner obliged to meet partnership obligations from his personal assets has a right to recover from those partners who have not borne their agreed share of the liability.

(d) A partner cannot limit his liability to outside creditors by mere agreement with other partners. The only arrangement which limits liability is the use of the limited partnership, which is discussed later, in which case creditors would have notice of any limitation upon partnership liability and could guard themselves accordingly.

(e) In the absence of a specific agreement, partners share profits and losses equally, regardless of their capital contributions. Customarily, partners contributing different amounts of capital will arrange for a proportionate sharing of profits and losses, save where such inequalities are counterbalanced by other factors such as unusual contributions of time or of skill.

In the case of the corporation the owners, once their agreed investment has been made, stand in no further danger of loss through failure of the business assets to cover business debts, except for a few minor exceptions, which will be discussed later.[5] It should also be clear from what has been said about the separate personality of the corporation that it is not liable for the personal debts of its owners and is unaffected by their personal insolvency. Creditors of the owner-stockholder will be able to seize his stock, however, as one of his personal assets in satisfaction of their claims.

2. *Credit standing.* As a corollary of the greater liability to creditors, the individual proprietor and the partnership will both

[5] See p. 86, under the discussion of par value.

enjoy greater credit than a corporation possessed of equal business assets. Sometimes, in the case of a small business, incorporation might even prove a special credit handicap on the grounds that the shield of limited liability might be used unfairly by one or a small group of owners against their creditors. Thus the owners of a small business might, if it were incorporated, drain off assets beyond the reach of creditors by paying themselves excessive salaries. The conversion of the corporation's business assets into personal assets would put them beyond the claims of the corporation's creditors.

3. *Permanence of organization.* The individual proprietorship begins and ends at the will of the owner, save of course that it must end with his death. Partnership as a personal relationship among a group of men begun by their mutual agreement is brought to an end by the death, withdrawal, bankruptcy, or legal disability of any single partner.° His position cannot be transferred to another by gift or by will. If a partner should die or become insane or bankrupt, then the executor, guardian, or trustee in bankruptcy, as the case might be, would have the right to require only that the remaining partners account for and pay over the cash value of the interest of the former partner, liquidating the business if necessary to do so. This right of every partner to choose his partners and so the terms upon which he shall associate with them is spoken of at law as *delectus personae.* It bars a partner from delegating his authority or transferring his interest to another without his partner's consent. A partnership is often successful because it is a winning combination of different abilities which complement one another, and the removal of a single person would materially reduce its profit-winning qualities. Such an organization might very well call for a complete realignment if any member dropped out, and the impermanence of the partnership form of organization would under such circumstances hardly be thought a weakness. The weakness in such a case lies in the necessarily temporary nature of such personal contributions rather than in the form of organization.

When, however, a going organization has been built up with the ability to carry on indefinitely, the corporate form of organization is desirable. In the majority of states the corporation can secure a charter giving perpetual life. In the states which do limit the maximum life period, which varies from 20 to 100 years, the life may be easily and indefinitely prolonged by the renewal

° Partnerships may also terminate through the lapse of time agreed upon, mutual agreement, war between two nations of which two of the partners are citizens, transfer of a partner's interest either by his own acts or by operation of law, or judicial decree when there are internal dissensions, incapacity, misconduct, or insolvency.

of the charter.? Incorporation, then, offers valuable relief from the dangers of partnership dissolution, which inevitably follows if the surviving partners cannot agree upon terms among themselves or with the successors to the former partner's interest. Dissolution often means that much of the value of the business may be dissipated, and even the threat of dissolution may have serious consequences by weakening the credit standing of the business.[8]

4. *Ease of transferring ownership interests.* The corporation has limited liability and continuous life, and the owners may transfer their interests whenever and to whomever they please. In the partnership such ease of transfer does not and could not well exist, partly because it would permit the injury of creditors through the sale of ownership from strong to weak hands after a granting of credit, and partly because of the possible injury to the remaining partners should one of their number relinquish his interest and place to a person who was financially weak, incompetent, or dishonest.

5. *Ease in raising capital.* Each of the preceding characteristics, except the second, gives the corporation a tremendous advantage where the requirements of the business demand larger sums than can be had by using the property and credit of those who are the immediate sponsors of the enterprise. For either the sole proprietorship or the partnership, the amount of assets which the business can command is limited to what the owner or owners can contribute plus whatever credit they may obtain. When the money of the inactive capitalist, who is not expected to take any important part in the management of the enterprise, is sought, it is extremely desirable if not absolutely essential to offer (1) some limitation upon the loss he may suffer, (2) a permanent form of organization, and (3) the possibility of disposing of his interest to other capitalists without legal difficulty. The comparative ease

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So great is the ease of charter renewal under the general enabling statutes of today that a limited period of duration for the corporation would never be thought of as objectionable. At a former time, when the corporate charter could be secured only by special act of the legislature and then might contain unusual special privileges, the perpetual feature was highly desirable. In the case of utilities enjoying certain privileges, the renewal may be obtained only by bargaining with the granting authority, so that such corporations seek at the present time indeterminate grants, which amount to perpetual grants during good behavior. The danger of the limited life where renewal is subject to political considerations may be seen in the history of the First and Second Banks of the United States and in the debates over the change from a 20-year to an indeterminate life for the Federal reserve banks. The McFadden Act, passed in 1927, gave both Federal reserve banks (Sec. 18) and national banks (Sec. 2) existence "till dissolved by Congress." Such considerations are not important to ordinary commercial and industrial corporations.

[8] Partnership life insurance, payable to the surviving partners, may reduce this hazard somewhat by providing a fund to reduce business liabilities or enable the surviving partners to buy out the former partner's interest or both.

of raising capital which results from the presence of these characteristics in the corporate form of organization makes it the wellnigh inevitable choice for any large business which cannot adequately supply itself with funds for growth from its profits.

6. *Expense and difficulty of starting.* The sole proprietor has no problem or expense in beginning his business which can be attributed to the form of organization. He simply begins business without formality. Some kinds of businesses usually run by individuals, such as restaurants, barber shops, beauty parlors, and employment agencies—businesses which for some reason or other seem to require special regulation for the sake of the public good or of the public purse—may be obliged in certain jurisdictions to seek licenses, but this requirement would exist regardless of the form of organization.

The partnership is similarly an informal type of organization and may legally exist without any written contract among the members. A well-conceived organization will, however, have articles of copartnership drawn up covering such matters as the division of profits and losses, duration, compensation of partners, conditions for termination of the partnership, method for conducting the dissolution, capital contributions and their payment, withdrawals by partners, duties of partners, keeping of accounts, and rendering of regular periodic statements. A well-drawn agreement may materially contribute to the success of the organization by reducing the hazard of later friction among the partners.

The creation of a corporation gives rise to the most expense and effort. The formalities involved and the fees and taxes incurred, while not ordinarily prohibitive, are nevertheless the sort of barrier which would cause a small organization to hesitate, even though it might otherwise prefer incorporation. (The actual details with respect to the formation of the corporation are discussed in Chapter 4.)

7. *Ease in functionalizing management.* The partnership compares unfavorably with both the sole proprietorship and the corporation in its ability to organize and departmentalize its internal affairs. Gerstenberg has stated the matter forcefully as follows:

> Because each partner is a general agent, it is difficult to tie the partners down to definite tasks. Let us imagine a situation. A partnership of three persons wishes to give one the exclusive selling power, another the power to purchase, and the third the power to produce. They make a written agreement embodying these ideas. This will be binding only on persons who know the terms of the agreement. For example, if the selling partner buys goods useful for the partnership from a person who does not know that the various functions have been distributed among the partners, this third person may hold the partnership liable for the contract price. Filing the agreement in a public office ordinarily will not be of any help,

for such instruments are not required to be filed and third persons therefore would not have constructive notice of their contents. To be sure, the offending partner in this case may be held to account for breach of- his contract, but in practice the partnership will usually have to dissolve when the partners begin to enforce legal remedies against one another.[9]

The individual proprietor, because he is the arbiter of all questions pertaining to his business, can limit and define duties or functions at will. He needs only to avoid giving his representatives the appearance of general agents to the outside world in order to avoid obligation for their unwarranted acts. And, should any violations of his rules of organization occur, he may inflict the penalty of dismissal. No such summary procedure can solve differences between members of a partnership, where all have coordinate rank. "General agency," or the right of any general partner to bind the partnership by his acts, is one of the special characteristics of the general partnership.

By virtue of its very flexibility the corporation can organize its working members as it chooses, departmentalizing, allocating responsibility, and dividing or centralizing authority as seems most fit to the owners or to their delegated representatives. In the- first instance, the owners, who are the stockholders, elect a board of directors to represent them and govern the conduct of the business; the board, in turn, elects the officers of the corporation, and these officers then select the personnel and define their several duties and responsibilities.

8. *Freedom from public regulation.* While the businesses of particular proprietorships or partnerships may be regulated because of their nature, neither form of organization is regulated *per se.*

Because the corporation is a "person" created by the state and possibly because the corporate form of organization is identified with "Big Business" and so at times is the object of public hostility, it attracts special legislation which is often burdensome. First of all it may be required to make reports concerning its activities and finances at regular intervals. Then there will be various reports to the Federal and state governments for various tax purposes, even if no tax liability exists. When the corporation operates in a number of states, the expense and trouble of rendering the required information may be considerable. Businessmen frequently prefer secrecy, feeling that the information divulged may be of advantage to °competitors or may have an undesirable effect upon their relations with the public. It is probable that the value of secrecy for legitimate businesses, even when they are highly competitive, is of no such

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C. W. Gerstenberg, *Financial Organization and Management* (New York: Prentice-Hall, Inc,, 2nd rev. ed., 1939), p. 162.

importance as has been thought by the old school of businessmen.

The regulatory feature is also important in the ordinary conduct of the corporation's daily business. Because the corporation is an artificial person, it must pursue the rules of conduct laid down by the particular state in which it is acting. Observance of these rules requires special care in keeping within the powers granted by its charter of incorporation, in calling and holding stockholders' meetings, in the execution of contracts, and in operating in foreign states —that is, states other than that of incorporation.

Unlike a natural person, a corporation has no legal standing outside the state of its incorporation unless it takes special steps to qualify itself. Failure to qualify may mean serious penalties and the inability to enforce contracts made in a foreign state. Qualification may, however, involve special burdens in the way of reports and taxes. The whole matter of "doing business in foreign states" is marked by technicalities which go beyond the scope of our subject; but it is a study which would be profitable and reveal the complex legal problems created by incorporation of a business—matters which do not perplex or restrict the freedom of movement of the individual proprietor or the partnership.

9. *Taxation.* As in the matter of special regulation, so in taxation the sole proprietorship and the partnership enjoy complete freedom from taxes levied on the form of organization as such. Those who would incorporate a business must consider the following possible types of tax burden:

First, the tax upon incorporation, which is based usually upon the amount' of authorized capital stock. While this tax varies considerably among the several states, it is not prohibitive in any case.

Second, the annual franchise, or license, taxes levied by the state of incorporation and by other states in which they may choose to do business.[10] This tax may vary from nothing in certain states like Florida and Indiana to as much as $2.50 per $1,000, or $\frac{1}{4}$ of 1 per cent, of capital. Pennsylvania charges $5 per $1,000, or $\frac{1}{2}$ of 1 per cent, of capital, but only on the portion used in the state. This tax is frequently graduated, the rate decreasing as the amount of capital grows. In the case of the annual franchise tax levied upon foreign corporations, the rate is ordinarily applied to the amount of capital stock which is used in the particular state.

Third, the annual capital stock tax to the Federal Government ($1.00 per $1,000 of adjusted declared value) and sometimes to the state of incorporation.

Fourth, a tax upon corporation net income in some states.

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[30] For devices employed to minimize or eliminate these taxes, see p. 52.

Fifth, Federal taxes upon income, which, at the present time, are much more important for the average profitable business than the taxes just mentioned. Under the Revenue Act of 1939 (the rates apply to taxable years after December 31, 1939) the Federal Government levies a tax on business corporations with net income of not more than $25,000 at rates graduated from 124 per cent on the first $5,000 of net income to 16 per cent on income over $20,000. Taxes on corporations with net incomes in excess of $25,000 are computed at the flat rate of 18 per cent on net income, which excludes interest on United States obligations. Dividend income received by the corporation itself—that is, income received from other corporations —is given special tax treatment that need not concern us here. Corporations having income slightly in excess of $25,000 and so placed in the higher tax bracket are allowed to compute their tax by a special formula, which in some cases will reduce their tax bill.

In addition to the taxes on net income, there is also imposed an excess profits tax of 6 per cent on net income between 10 per cent and 15 per cent of the declared value of the stock for capital stock tax purposes and 12 per cent on the excess over a 15 per cent return. A surtax on the improper accumulation of surplus of 25 per cent to 35 per cent of the amount of net income not distributed as dividends is also provided in the act, but in general this provision has been enforced rarely and is likely to be of importance to personal investment corporations rather than to ordinary business corporations. This surtax is designed to prevent the withholding of dividends and the avoidance of personal income taxes.

The unincorporated business pays none of these Federal taxes upon income, but the owners report their share in any profits as personal income, regardless of whether it is withdrawn from the business or not. The taxes on individual income consist of a flat normal tax of 4 per cent on net income in excess of personal exemption and earned income credits, and a surtax graduated from 4 per cent to 75 per cent on net income after personal exemptions plus the sum of $4,000.

If a businessman intends to operate an enterprise as a corporation and take out all of the earnings each year, he will have to pay all of these various taxes on the corporation in addition to those levied upon his personal income, which includes that derived as dividends from the business. All this extra burden of taxation is borne for the sake of using the corporate form of organization. The only tax advantage which may obtain is through the corporation retaining some of its earnings, so that they fail to become a part of the owner's taxable income. Whenever the owners are subject to very high surtax rates upon their personal incomes, such retained corporate income will escape a tax burden which may counterbalance some of

the corporation taxes. If special penalties in the form of undistributed profits taxes are levied, such retention becomes less attractive.

Reference to the selected individual income tax rates given in Table 3 shows at what point the use of the corporate form of organization becomes a cost in terms of income taxes alone, if it is assumed that the earnings are to be retained in the business indefinitely. If the corporation were subject to a 121 per cent tax on its net income, and the owner's sole source of income was the earnings of this business, the tax bill for the individual would amount to only 121 per cent of his total income, as shown in the last column, when his income amounted to approximately $31,000. If the cor-

TABLE 3

SELECTED INDIVIDUAL INCOME TAXES

(Revenue Act of 1939)

Net Income		Highest Rate of Surtax	Total Normal and Surtax	Tax as Percentage of Net Income**
Before Personal Exemption	*After Personal Exemption**			
$ 4,500	$ 2,000	0%	$ 80	1.8%
6,500	4,000	0	160	2.4
8,500	6,000	4	320	3.8
12,500	10,000	6	700	5.6
20,500	18,000	11	1,720	8.4
31,500	29,000	19	3,970	12.6
50,500	48,000	27	9,080	18.0
102,500	100,000	55	34,000	33.2
502,500	500,000	68	306,000	60.8
1,002,500	1,000,000	72	681,000	67.9
5,002,500	5,000,000	74	3,791,000	75.8

*Assuming personal exemption of $2,500 (married, no dependents). No allowance is made for "earned income" credit.
** Before personal exemption.

poration income taxes amounted to 18 per cent of the net income, they would equal the proportion paid by an individual with an income of approximately $50,500. In practice, this computation is complicated by these main considerations:

1. The owners may have income from sources other than their business which will push their personal surtax rates into the higher brackets.

2. The owner or owners may be able to lower the apparent corporate income and the corporation income tax by paying themselves salaries. Such salaries, provided that the amounts are not excessive for the services rendered, are a deduction or expense in computing the corporation's taxable net income, so that such income is subject only to the personal income tax of the individual.

3. The earnings may fluctuate considerably, making estimation of the cdmparative tax burden extremely difficult.
4. The personal fortunes of the owners may differ, so that the comparative merits of incorporation will not be the same for all.

The problem is not susceptible to ready generalization for these reasons, but in a particular situation the parties concerned will do well to estimate the tax burden as carefully as possible in order to be certain that they are not paying excessively for the advantages of incorporation.

Utilization of the several forms of organization. Clearly the sole proprietorship and the partnership are generally impractical save for small business units, because of their difficulty in obtaining outside funds. The exceptional merchant prince like John Wanamaker or the exceptionally successful first-generation manufacturer such as Henry Ford might expand without public financing and from a small beginning build a great organization from profits. But, even when a large business has been built strongly enough by such an enterpriser to survive the loss of a proprietor or a partner, it is nevertheless likely to adopt the corporate form of organization ultimately, for the corporate form will permit the division of the property among heirs without destroying the business unit. The flexibility of the corporation in such a situation may be illustrated by the following variety of solutions to such a problem:

1. Upon the death of a partner the surviving partners could organize a corporation and give the estate bonds or notes, which would be a prior claim upon the business property and so a relatively stable and safe investment.
2. Bonds or notes might be sold to the investing public in order to make a cash settlement with the estate of the deceased. Because of the high rates for Federal and state inheritance taxes, the cash might be most necessary to the heirs for liquidating the tax liability.
3. If there were but a single heir, who possessed youth and promise and was capable of assuming the risks of part ownership, he might be given a share in the form of stock and a job, without the dangers which would attend the admission of such an inexperienced person to the rank of partner with the power of general agency which accompanies that position.
4. The partners might dispose of their interest along with that of the estate, the buyers taking advantage of the relative ease of corporate financing to obtain a large part of the funds from the investing public."

" The ease with which cash may sometimes be obtained in the securities market is illustrated by the financing of the purchase of Dodge Brothers, Inc., in 1925. Dillon, Read and Company bought the stock of the old corporation for $146,000,000 and then sold the assets of the old company to a new corn-

This valuable flexibility of the corporation for meeting the changing needs of the various kinds of people interested in the business will become more apparent as our study proceeds.

In general, the characteristics of the business unit employing the sole proprietorship or partnership form of organization will be the following:

1. Capital requirements readily cared for by the money which the immediate small group is willing to advance or can obtain through credit based on such advances.
2. Owners who possess so little property outside the business or regard the risks of the business as sufficiently moderate that they do not feel the need of limiting liability to their business investment.
3. Profits ample enough to provide for any desired expansion.
4. The loss of the proprietor or partner is so likely to call for the sale of the business or require such a complete realignment of interests that the impermanence of the form of organization is matched by the impermanence of the business arrangement itself.

Whenever the foregoing conditions, which constitute the normal characteristics of the small business unit, are found, then the taxes and the legal "red tape" which attend the corporate form of organization will be sufficiently disadvantageous to bar its use In turn, it might be said that the special burdens which the corporation bears are the price the owners are willing to submit to in order to obtain the advantages of the corporation, the chief of which is probably limited liability. [12]

In the corporate form, with its limited liability, permanent life, and transferable shares, industry found it possible to offer part ownership in the form of a genuine investment—that is, a commitment of funds without the attendant cares of business management which the proprietor or partner assumes. The division of these shares in the ownership into small units not only has made an appeal to a large number of persons with small sums available, but also has made it possible for even relatively small investors to divide their investment fund among a great many opportunities,

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pany for securities which, when sold on the market, brought in more than the original purchase price. The bankers were able to retain the entire voting stock of the new company.

" Moulton counts this advantage so great as to state, "The growth of large-scale enterprise was dependent upon limited liability." H. G. Moulton, *Financial Organization and the Economic System* (New York : McGraw-Hill Book Co., 1938), p. 125. The advantages of the corporation can best be appreciated by studying its historical rise. See A. B. Du Bois, *The English Business Company After the Bubble Act, 1720-1800* (New York: Commonwealth Fund, Division of Publications, 1938). B. C. Hunt, *The Development of the Business Corporation in England, 1800-1867,* (Cambridge: Harvard University Press, 1936), describes the struggle for freedom of incorporation and the efforts to obtain limited liability.

thereby reducing the possibility of loss in the same manner that an insurance company does by scattering its risks. Moreover, the very size of large business units, made possible by the corporate form of organization, gives a certain permanence valuable to the investor. Finally, a large corporation becomes well known to a greater number of people, so that the market for its securities is increased.

Reviewing the field of business activity, certain generalizations with respect to the commonness of the various forms of organization may be made from observation. Some fields are dominated by the corporate form. Financial institutions, such as commercial banks and insurance companies, are in this class, sometimes because of compulsion by the state in order that they may be more easily regulated for the protection of the public, and sometimes because the amount of capital required naturally calls for a corporation. The public service industries as a class require large amounts to be invested in fixed assets, a sufficient reason for their almost universal use of the corporation.

Merchandising organizations generally have small beginnings. Very often the accumulation of a small sum by an individual is the influence that starts him in business. Under such circumstances it is not peculiar that the sole proprietor and partnership are popular in this field. With the growth of the chain store, an ever-increasing proportion of the total business done is going to units corporately organized. The permanence of values of a large continuing organization requires the corporation; the increased number of owners desire readily transferable shares. Manufacturing establishments very usually have modest beginnings also, but such projects on the average need somewhat more initial capital, and the idea, frequently an invention, belongs to a promoter without sufficient funds. Probably, the newly projected manufacturing enterprise is much more frequently incorporated than is the newly begun mercantile establishment, even though in theory a partnership combination of a promoter and a capitalist could solve the financing problem of either. Here, too, the need of various investors requires a permanent organization, transferable ownership, and limited liability.

Perhaps only in the field of personal service are the simpler forms of organization more important. Here, if anywhere, capital is relatively unimportant, and the relationship of the customer and the business is very largely personal. Only when a personal service organization, such as an advertising agency, has grown to unusual size and created an unusual goodwill associated primarily with a firm name is incorporation at all likely, and then perhaps as a device for profit-sharing in order to create *esprit de corps* rather than as a device to aid financing. Sometimes the corporate form has been adopted in a large concern of this type to permit the sale of a part

interest to the public, thereby giving marketability to the balance of the owners' holdings and an opportunity to withdraw a part of their stake and place it in diversified investments so as to minimize risk.

The social point of view. In a work primarily concerned with the business of financing it may not be amiss to note the reasons for considering the social point of view. Because the community is more important than any individual, the social merits of business institutions should be considered at least as important as the business merits. Society, when it knows its own best interests, is in a position to foster desirable ends by favoring legislation or to penalize the undesirable by restrictions, and taxes. The businessman, in turn, can present the merits of his own case more ably if he analyzes the broader social interest as well as his own self-interest. Furthermore, the better type of businessman should derive considerable satisfaction from aligning his own interests with those of the community in the manner which was regarded until recently as the peculiar attribute of the professions. To avoid, as far as conceivably possible, the less obviously antisocial business methods should be as natural as the avoidance of the more obvious forms of crime like larceny and forgery.

Points upon which the several forms of business organization have been contrasted with respect to their social merit, very often to the disparagement of the corporation, are as follows:

1. *Motivation to economical effort.* Because, in the case of the sole proprietorship and the partnership, the management is conducted directly by the owners, there is the very strongest incentive to economy, particularly in the case of the former. The corporate management, on the other hand, may own very little of the stock and have little or no share in the profits. This difference should mean weaker motivation to economy and less efficient management, at least for those corporations where such a separation between ownership and management does exist. In practice this handicap is frequently counterbalanced by systematic organization and control, the advantages of the division of labor and the employment of specialized experts, and the advantages of large-scale production and mass distribution. The less effective motivation of the corporate form of organization is of importance in some fields, but in others it is more than offset by the advantages of large-scale operation, which are made possible by the corporation as a financing instrument.

2. *Conservation of capital.* Just as an apparently stronger motivation to economical effort exists in the two simpler forms of business organization, so it might be argued that they would have

the stronger reason for conserving the capital of the organization. As a practical matter, the corporation, by facilitating the flow of funds from savers to the corporation, which can use those savings profitably, has enabled the investment of funds more efficiently than would be possible if every person were obliged to go into business in order to put his savings to work. By offering a greater number and variety of investment opportunities, the corporation has remarkably stimulated the accumulation of the nation's economic capital.

That much capital is wasted through unwise investment is undoubtedly true, and whatever measures may be taken to reduce unnecessary losses are desirable. Care should be had, however, not to confuse this matter with the "corporation" problem. Individuals entering business unwisely, especially in the field of retail trade, probably "waste" as much capital savings as corporations. Such "waste" is the price paid to permit freedom in competition (although probably a higher price than would be necessary if education in the art of business were at a higher level). From the social point of view such losses can be justified if it can be shown that they are less than the total economies and increased production brought about by the spur of competition.

3. Abuses of trust. Because the investors in a corporation are so far removed from contact with its affairs, it is argued that dishonesty and corruption are inherently more likely than where the closer relationships of the simpler forms of organization exist. Undoubtedly distance and numbers make supervision by stockholders difficult, but the trouble is to a considerable degree the effect of magnitude rather than form of organization. However, we have pointed out that such size is largely made possible by the corporation. Whatever internal abuses do arise because the business unit is large may be limited by suitable accounting checks, publicity, and regulation.

4. Monopoly. Because the corporation does permit the raising of unlimited funds, the charge of monopoly creation has been levied against it Without the corporation such large aggregations of capital as are essential for monopoly would ordinarily be impossible.[13] To the extent that monopoly does exist and competition is eliminated, excessive prices and poor service may be fostered. But the act rather than the instrumentality should be the object of criticism. In general, if fair business methods are employed, mere size will not insure monopoly.[14] Should investigation reveal that

[13] See Chapter 23 for the discussion of the voting trust, another possible instrument of monopoly, and Chapter 25 for a• discussion of the holding company, a corporation specifically designed to effect concentration of control.

[14] A. S. Dewing, *Corporate Promotions and Reorganizations* (Cambridge: Harvard University Press, 1914), gives an account of monopolies which were built by sheer combination without regard to efficiency and their failure as a

monopoly gives the community the best and cheapest service in a particular field, as has been demonstrated in the case of the public service corporations, then a policy of adequate regulation or state ownership forms the logical corrective measure. If the business showing a monopolistic tendency does not provide the most economical service, it will be able to maintain itself only by unhealthy business practices, against which the state may direct its restrictions. When the enforcement of fair trade practices proves insufficient to check monopolistic tendencies, suitable legal prohibitions should be sought to prevent combinations that create monopoly position.

5. *Encouragement to economic and social inequality.* Bemuse the corporation has been identified with large-scale business and with the permanence of the business organization, it has been regarded by some as an important factor in creating and maintaining economic inequality. It is further argued that democratic ideals and institutions are not safe where great and permanent disparities exist in the wealth of different classes of the population. The permanence of the modern industrial organization does tend to perpetuate large fortunes in much the same manner that in the Middle Ages large landed estates created an economic class apart and insured their succession from generation to generation. Should the community ever decide that the perpetuation of large family fortunes is undesirable, the remedy would appear to lie not in any attack upon the corporation and the destruction of the business organization, but in the taxation of inheritance. The permanence of our industrial organization is useful and desirable, and any device such as the corporation which permits the members to come and go without interruption of the business process is very valuable.

It should be noted, before concluding, that many of the advantages of the corporation are closely associated with its ability to serve large-scale business as opposed to the natural limitations upon growth under the sole proprietorship and the partnership. Because some form of organization with limited liability, permanence, and similar attributes is necessary to large-scale business, it is not wholly illogical to recite the advantages and disadvantages of large-scale business as such as those of the corporation, but the more exacting course of giving only the merits of the corporation *as a form of organization* has been used here.

The chief dangers of the corporation probably lie in its impersonal character, which makes corruption and abuse of confidence more likely, and in its capacity for growth and expansion, which renders oppressive monopoly easier. The chief merit of the corporation appears to lie in its peculiar characteristics which enable capital

result of new, vigorous, and efficient competition. See, for example, Chapter V, "The Promotion and Failure of the National Cordage Company."

and effort to combine readily on the large scale called for by the mechanical civilization which has evolved out of the Industrial Revolution. Although primarily responsible to the owner-stockholders, the management of the large present-day corporation is in a much better position to administer in a reasonable and judicial fashion the several conflicting interests of the investor, the consuming public, and labor than ever was the hard-driven and self-interested owner-manager of the proprietorship or partnership.

The very size of the large corporation gives it unusual economic power, but it also makes it vulnerable to political attack. Once brought into the open, abuses are more readily corrected and regulated. Where the industry consists of a multitude of small units, the problem of regulation is extremely difficult, as the administrators of the ill-fated National Recovery Administration found to their sorrow. The unfair trade practices, the misleading of the public, the bribery of public officials, and the harsh labor policies of certain large corporations have been well publicized. The student of business and economics should inquire carefully before deciding that such troubles are the result of a form of organization. If his studies carry him far enough, he will discover that the corporation itself—especially the larger unit—can be made the object of unfair political attack, excessive taxation, and the exactions of other strong pressure groups, largely because of the popular habit of personifying the corporation and failing to consider the merits of the case of those whose savings supply our business sinews.

CHAPTER 3

LEGAL FORMS OF BUSINESS ORGANIZATION *(Continued):* THE BUSINESS TRUST, THE JOINT-STOCK COMPANY, AND MODIFICATIONS OF THE PARTNERSHIP

THE several types of business organization other than those discussed in the preceding chapter—namely, the business trust, the joint-stock company, and the various modifications of the partnership—have been brought together for description in this separate chapter for two reasons: first, they lack commercial importance and are used but infrequently, and, second, they are most easily studied by noting their differences from either the general partnership or the corporation, whichever type they resemble more closely. Though these forms of organization are relatively unimportant, their analysis helps to reveal both the advantages and shortcomings of the more frequently employed forms as well as the types of situations that make certain characteristics significant.

The Business Trust

Comparison with the corporation. Of the several forms about to be described, the business trust is the most unique. The business trust is also known as the Massachusetts trust, the business, or voluntary, association formed under a deed of trust, or the common-law trust. It is simply a special application of the principle of trusteeship to business, the owners of business property turning it over to a board of trustees for management and operation. The idea of the trust is most widely known and easily illustrated by the testamentary trust—that is, a trust created under the terms of a will. The person drawing the will is the *creator, trustor,* or *settlor.* Upon his death the specified property is turned over to the named trustee, very often in these days a trust company specializing in this sort of activity and having known ability in the investment of funds. The beneficiary or beneficiaries (known as the *cestui que trust* or the *cestuis que trustent)* are enabled to receive an income during the life of the trust without effort or skill upon their part. A trust may be established for any of a number of reasons besides

those of the business trust and the testamentary trust, the two uses already mentioned. A group of persons may establish a pool of securities with a trustee for the purpose of more expert investment, forming an investment trust (although most "investment trusts" use the corporate form of organization) ; a group of stockholders may deposit their stocks in trust in order to insure voting control of one or more enterprises, thereby forming a voting trust; or, an individual may establish a trust fund during his life, thereby creating a living, instead of a testamentary, trust. To accomplish such a variety of purposes it is clear that trust arrangements must be highly flexible. The contractual relationships are, as a matter of fact, settled by the terms of the trust agreement. The trust agreenient for the business trust will ordinarily be found to create relationships very similar to those created by the corporation, save that they are governed by the common law rather than by the special statute laws passed by the individual states to govern corporations.

It may be noted in passing that the term *trust* in popular usage has come to mean *monopoly.* This use grew out of the fact that some of the earlier attempts at industrial monopoly in this country used the trust form of organization, the Standard Oil Trust being a notable example. As a result, we hear of "antitrust" legislation, which would more properly be termed "antimonopoly" legislation.

A study of the parallelism between the corporation and the business trust reveals how similar they may be. The trust agreement takes the place of the corporate charter, defining the nature of the business, its capitalization, its duration, and the terms of control. The board of trustees takes the place of the board of directors. The trust may issue both bonds and shares, and the shares may be classified in the same way as corporation stock is. In fact, the shares in the trust are often spoken of as stock, and the beneficiaries called stockholders. These shares may be listed and dealt in on the stock exchanges and transferred in the same ready manner as the stock certificates of a corporation.

In order that the resemblance between the corporation and the business trust may be extended, the liability of trustees and shareholders must be limited to the same extent as that of directors and stockholders in the corporation. Under the ordinary common law a trustee would be required to use the care and judgment of a "reasonably prudent" man in managing the property of the trust. Such a rule has been found desirable in preventing trustees from speculating with funds left in their care for investments to be made for the benefit of helpless dependents. A trustee, as under the terms of a will, who fails to observe the rule of prudence becomes personally liable for any loss which results. In a business, however, many risks must be assumed as an incident of operation, and in order to avoid

any possibility of undue liability being incurred by the trustees, the trust agreement will stipulate that the trustee will be liable only for gross negligence or bad faith. [1] After the manner of the corporation, this would not protect the trustee should he use the property for purposes other than those set forth in the trust deed.

Unless outside creditors are put on notice that they may look only to trust property for protection, they will be able to hold the trustees personally liable in spite of the agreement. Consequently contracts should be so drawn that creditors may know that they may look only to the trust property for payment. [2]

Liability of beneficiaries.. If the owners (or beneficiaries) of the trust are to be free from liability, it is ordinarily deemed necessary that they give up the right to elect or remove trustees. If they are willing to give up control and allow the board of trustees to fill vacancies caused by death or resignation, their freedom from liability to creditors is assured. If, however, they attempt to retain the right of control, such as the corporate stockholder possesses, the courts may deem their organization, a partnership as far as the creditors are concerned. Contradictory decisions in the various states might prove dangerous on this point to a business trust, which operated in more than one jurisdiction.

Even though the trust might be held a partnership because of the shareholders' exercising control over trustees, limited liability might be obtained by a statement of such restriction of liability in the trust agreement itself and by express stipulation, in all contracts and corporate instruments that might, create liability, to the effect that the beneficiaries shall not be personally liable. Such provisions are, however, but a doubtfully satisfactory measure because of possible failure of the trustees to notify those contract creditors who are without knowledge of the intention to limit liability to the amount of the trust property; or because the liability does not arise through a contract but through some tort committed by the trustees in managing the business; or because the particular juris-

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I Thus, the frequently cited Boston Personal Property Trust states: "Each Trustee shall be responsible only for his own wilful and corrupt breach of trust, and not for any honest error of judgment, and not one for another. No Trustee shall be required to give a bond."

This trust agreement is reported in full in C. W. Gerstenberg, *Financial Organization and Management* (New York: Prentice-Hall, Inc., 2nd rev. ed., 1939), pp. 71-77. The agreement is also given in S. R. Wrightington, *The Law of Unincorporated Associations and Business Trusts* (Boston: Little, Brown & Co., 1923), pp. 475-484, and construed in Williams v Milton, 215 Mass. 1.

' Other suggestions are that the declaration of trust authorize trustees to pay for such insurance as they can obtain against any personal tort liability out of trust assets and provide that trustees shall be indemnified for any further losses out of trust property. Ira P. Hildebrand, "The Massachusetts Trust," *Texas Law Review,* February, 1924, pp. 144-145.

diction refuses to permit such a method of obtaining the equivalent of corporate limited liability.[3]

Life of a trust. In most states the duration of business or other trusts is limited to a period not longer than a certain number of years, often 21 years and 9 months, after the death of one or more persons named in the instrument.[4] This feature may give an element of uncertainty and impermanence to the organization, although the arrangement can be extended if the owners are able to agree upon terms of a new trust instrument and a board of trustees. A corporation with an expiring charter needs to go through the mere formality of requesting an extension of life from the state; an expiring trust must seek new life from its own beneficiaries or liquidate. The latter possibility might be reflected unfavorably in the credit of the trust as its term came nearer to expiration. In a few jurisdictions the statutes permit the creation of permanent trusts.

Taxation. In the past it was felt that the business trust had a decided advantage in the matter of taxation, resembling the partnership in its absence of special taxes rather than the corporation; but the tendency seems to be growing to treat business trusts more on a parity with corporations, to which they are so similar. At the time of formation there are only nominal fees, if any, incident to the filing of the agreement and the registration of the trade name under which the trust operates. Formerly there was no tax corresponding to the annual franchise or license tax of the corporation, but in 1916 Massachusetts imposed an annual tax on dividends or shares in these associations, and since 1922 New York has required the same annual franchise tax as for corporations. Should this form of organization become more popular in other states, it is quite likely that tax measures similar to those of New York and Massachusetts will be passed. Under the Federal income tax law, business trusts are now required to pay at the same tax rates as corporations. The income tax laws of New York and Wisconsin follow the same rule, as they do in most other states.

Merits of trusts summarized. The business trust has been advocated by some as a desirable form of organization to be used in-

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Thus, Texas very decidedly permits only the corporation and the limited partnership to limit the owners' liability to creditors. Calvert Magruder, "The Position of Shareholders in Business Trusts," *Columbia Law Review,* May, 1923, pp. 426-427 Kansas courts have found "trusts" illegal as being, in effect, corporations which have not been validly chartered in accordance with state law. (See Weber Engine Co. v. Alter, 120 Kan. 557, 245 Pac. 143.)

As a means of securing long life, see the duration clause of the Boston Personal Property Trust, in which the trust expires 20 years after the death of the last survivor of a list of twenty persons, a number of whom are children of the five trustees. This case was a Massachusetts trust, and the device would not be permissible in all states. In New York, for example, only two person's lives can measure the duration of a trust. See footnote 1.

stead of the corporation, a form which would have all the important merits but lack some of its disadvantages. It possesses the same advantages of (a) freedom of owners from liability to creditors, (b) transferable shares, (c) easy division of managerial functions, (d) flexibility as to form of capitalization, and (e) consequent ease in the raising of large sums of money. Unlike the corporation it avoids some, but not much, taxation and may enjoy somewhat greater secrecy and freedom from regulation. These advantages, particularly that of reduced taxation, have proved but a small force in popularizing the business trust. The business obliged to confine its operations to a state whose corporate taxes were particularly high might find the trust form advantageous, but the financial inducement would be small when the business could choose a state with moderate taxes. Furthermore, however settled the law of trusts may be, there is a relative lack of familiarity as compared with the corporation law, even though William C. Dunn writes:

> In all probability no part of our law is so well settled as that in reference to trusts and trustees; a rule on this subject laid down in one section of the country is usually adopted and applied in another. The reason for this is readily found in that the principles underlying the trust are the same throughout the country irrespective of state lines. This of course is not true of the corporation, for each state has its own acts and no state is bound by the interpretation of the corporate law of a sister state. [5]

This strongly favorable statement fails to emphasize the fact that the business trust is a special form of trust which its creators try to alter by contract so as to free the trustees and beneficiaries from liabilities which are not infrequently associated with the common-law trust; also that the greatest use of the latter has undoubtedly been the care of property for the beneficiaries of a deceased person's estate.

Gerstenberg voices the more common feeling of uncertainty when he notes that established court precedents are not uniform in the English-speaking jurisdictions and that some tax burdens are preferable to uncertainty and possible confusion. [6] The very commonness of the corporation has resulted in a mass of court cases which have adjudicated and clarified the meaning of the corporation statutes. The business trust has had no vogue at all comparable with that of the corporation.

The peculiar characteristics of the business trust have resulted

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[6] William C. Dunn, *Trusts for Business Purposes* (Chicago: Callaghan & Company, 1922), p. Similarly, John H. Sears writes that business trusts "bring to their legal support, a long line of authority based upon broad principles applicable thereto and irrespective of statutory experiment." *Trust Estates as Business Companies* (Kansas City: Vernon Law Book Co., 2nd ed., 1921), p. 10.

Gerstenberg, *op. cit.,* pp. 70-71.

in its being used but rarely as a form of organization for the ordinary run, of commerce and industry.. Its use has been chiefly confined to (a) the business of real estate, (b) meeting peculiar legal situations, such as the public utility holding company in Massachusetts, and (c) temporary situations which make it desirable to fix the control of, a business in .the hands of a board of trustees for a short period of time.

The use of the business trust to hold real estate arises from the common ban upon the indiscriminate holding of real estate by corporations. In some states corporations are permitted to hold only such real, property as is essential to the carrying on of the business. If its affairs have primarily to do with real estate, as in the case of a hotel, an office building, or some other building, then a corporation may be formed but may hold only a single property.

This, prohibition dates back to the Middle Ages, when it was often' desirable to create "uses," or trusts by which the legal and equitable ownership of property could be separated. Thus in order to avoid the statutes of mortmain, which limited the ownership of land by the great church corporations, trusts were established whereby the legal title to property could be held by a lay person as' trustee, but the practical benefits of ownership could be given to the ecclesiastical bodies as beneficiaries.[7]

Historically, then, the trust device owes its use to the fact, that at one time corporations could not hold more than a single parcel of real estate for investment purposes. Probably in no state has the use of the trust been so prevalent as in Massachusetts. Usage arising out 'of some natural advantage makes for familiarity,' and familiarity in turn makes for increased usage. In the later part of the last century, when promoters were looking for a form of organization through which business might be worked into large combinations, they hit upon the trust as a possible instrument. The corporation had at that time not yet been granted the right to hold the stocks of other corporations, and so the holding-company device was not available. The result of this practice was that the term *trust* became identified with big business and monopoly, so that, when a wave of antagonism against the latter swept over the country, the trust idea fell into disrepute. In spite of the attacks upon monopoly, the trust form remains a useful and legal instrument of business organization.

While the most common use of the business trust undoubtedly remains in the field of real estate operation, it also finds use in meeting special legal situations, particularly where the corpora-

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Convenient summaries of the origin of the trust device and its early application are found in the *Encyclopaedia of the Social Sciences,* Vol. 10, pp. 189-191 (Massachusetts Trusts), and Vol. 15, pp. 122-126 (Trusts and Trustees).

tion is forbidden. Thus in Massachusetts a public utility corporation will be dissolved if the ownership or control of a majority of its stock should pass to a foreign corporation which issued its own securities or evidence of indebtedness based upon such stock. The practice is very clearly explained in an official statement issued by the New England Gas and Electric Association, a Massachusetts voluntary association, in connection with the sale of a bond issue in May, 1930. The vice-president of the organization wrote:

> The ownership and control of the stocks of the operating companies are vested in the trustees of the Association, the majority of whom are citizens of Massachusetts. Ownership and control of the common shares, of the Association are held personally by its organizers, who are citizens of New York, important stockholders and officials of Associated Gas and Electric Company, a New York corporation, and active in the management, not only of that company, but of the Group System of which it is the chief unit. It is intended by the organizers and the trustees of the Association to establish and maintain close affiliation in operation and management between the Associated Group and the utilities owned or controlled by the Association so that these utilities may, so far as practicable, benefit by the advantages of group management. Such affiliation, as distinguished from ownership or control by the Associated Company (which would be simpler and in our judgment better from every point of view), has been adopted as the most advantageous policy now legally possible with respect to any Massachusetts utilities in which the Association is interested, because Section 10 of Chapter 181 of the Massachusetts General Laws provides for dissolution of any Massachusetts public utility, if a foreign corporation, which owns or controls a majority of the utility's stock, issues securities or evidences of indebtedness based upon such stock. This statute was passed in 1894, to meet a special situation. In this connection, the existence of opposition to foreign ownership or control must be recognized, but it is nevertheless our hope that appreciation of the advantages of group ownership and control, in economy of operation, in reliability of service, and in availability of capital to meet the growth of the business, will ultimately overcome whatever sentiment exists against foreign ownership or control, and lead to change in the statute favorable to the larger group idea.

Two things are particularly worthy of note in the preceding statement: first, that the trust is regarded as a less satisfactory device than the corporation and is utilized only because the latter is forbidden, and, second, that the trust does not actually hold title to the operating properties but to stock in the corporations which own such property. Such trusts' are more properly called *voting trusts* than *business trusts.* An examination of those companies which are trusts would probably reveal that the majority, at least of the larger concerns, are voting rather than pure business trusts.[8]

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[8] There are a few prominent businesses carried on under declaration of trust. The Pepperell Manufacturing Company, a voluntary association organized in 1915, transferred its entire properties in 1927 to the Pepperell Manufacturing Company (incorporated), so that it has become merely a holding company,; its sole assets consisting of the entire capital stock of the operating company. The Texas Pacific Land Trust owns its real estate directly, but the Great

Whenever a temporary situation arises—such as might be due to financial embarrassment—in which the owners desire or are forced to part with control until the situation has been remedied, an operating property may be transferred to trustees. The business trust would have an advantage over the corporation in its ease of formation and dissolution, in the avoidance of some state taxes on corporations, and in the assured passing of control to the trustees until the situation is remedied, whereas the corporation directors would require annual re-election. Judging from its actual use in the past thirty years, the pure business trust shows little promise of becoming an important rival of the corporation. Its utility appears to be confined to meeting special situations where the corporation is forbidden to serve, or to meeting situations that are temporary.

Practical disadvantages of the trust. The attitude of the businessman towards the business trust as compared with the corporation may be summed up as follows:

1. Whereas the corporate form is familiar to practically every investor, the business trust is not generally known outside of the few states in which it is commonly used. Investors are apt to avoid organizations of a form which they do not understand.
2. The powers and limitations upon the powers of corporations and their officers and directors have become well defined by statutes and judicial decisions over a long period of years. Voluntary associations, however, are created by mutual agreements, which vary greatly in form and substance and have received little judicial interpretation.
3. The fact that the powers and limitations upon the powers of the association and its trustees, shareholders, and officers are not well defined legally makes it necessary to embody all of these matters in the declaration of trust' in great detail. This makes the declaration difficult for the businessman to understand and may cause considerable difficulty if the declaration is not drawn with the greatest care or if expansion or change in the character of the business makes the original provisions more or less obsolete.
4. Unlike the corporation, the trust cannot be given a perpetual life. Its life is measured by lives in being, which must be specified in the declaration of trust. While the agreement may be renewed, the duration of the association is uncertain and depends on how long persons named in the declaration continue to live. Provisions

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Northern Iron Ore Properties owns the common stock of several mining companies rather than having title to the ore lands themselves. Other prominent examples of business trusts are the American Optical Company, the International Paper and Power Company, the Ludlow Manufacturing Associates, and the Eastern Gas and Fuel Associates.

used to obviate this danger, such as the specification of names of a large number of young children, appear complicated to businessmen, bankers, and others.

5. Because shareholders cannot be guaranteed absolutely against personal liability, special precautions have to be taken, such as inserting a reference to the provisions of the trust agreement limiting personal liability in every contract, letter, business memorandum, or document. Besides being very annoying and leaving room for oversight which may prove to be dangerous, such notices serve to draw attention to the limited liability of shareholders, with the result that persons not familiar with legal technicalities have less feeling of satisfaction in dealing with the enterprise than they otherwise would have.

6. In some states the voluntary association has been used by fly-by-night mining and oil enterprises as a subterfuge and device to avoid regulatory statutes affecting domestic and foreign corporations. This has given the association a rather bad reputation with the courts, better business bureaus, security dealers, and the general public.

The Joint-Stock Company

General nature. The business trust is a variation of the trust idea which can with proper care be made to resemble the corporation closely; the joint-stock company, or association, on the other hand, is by its very nature similar to the corporation.[9] From the practical or financial point of view the joint-stock company is most easily described as a corporation whose shareholders have unlimited liability to the creditors of the business. The ownership of such companies is divided into equal shares, which are evidenced by certificates, transferable at the will of the holder. The holders vote for the managers or directors like corporate stockholders and receive their share in the profits in proportion to their holdings. The life of the association, like that of the corporation, is continuous and unaffected by the death, insanity, or bankruptcy of any stockholding members.

In general, such associations are formed under the common law. In a few states, including Michigan, New Jersey, New York, Ohio, and Pennsylvania, they are governed by statute, and in one jurisdiction, New York, they are required to file the agreement, or certificate, or association, which serves in the place of a charter, with the Secretary of State and the clerk of the county in which the principal business is carried on. In this state they are also required

[9] In England all incorporated associations, such as are called corporations here, are referred to as joint-stock companies. These are formed under the Companies Act and may have either limited or unlimited liability.

to pay an annual franchise tax like a corporation, and under the Federal income tax they pay at the same rates as the corporation.

Liability of owners. The partnership-like liability of owners is clearly the most serious disadvantage of this form of organization from the standpoint of financing. This liability is unlimited and covers all of the debts of the business. However, the right of creditors to recover from stockholders is restricted to debts incurred only during the period in which they are owners. This limitation, combined with the salability and ready transfer of shares, serves to modify the probability of loss considerably as compared with that of members of a general partnership. Furthermore, the danger of debts such as may be incurred in a partnership by the partners because of the general agency feature is absent in the joint-stock company, whose stockholders, as such, have no right to bind the corporation.

The stockholders may attempt to avoid liability to creditors by a specific statement in the original articles of association and the repetition of this statement in all contracts. Only where adequate legal notice had been given to the creditor that he must look solely to the property of the business for recovery of his claim would liability be limited. Some question exists as to whether even with such a stipulation against personal liability the members are exempt from creditors' claims.[10]

Unlike the corporation, the American joint-stock company, since it lacks separate legal identity, cannot sue or be sued in its own name (although in many jurisdictions it may sue or be sued through its officers or shareholders) and cannot hold title to real estate, which is usually vested in trustees appointed for the purpose.

Merits and usage. As a form of organization, the joint-stock company has most of the advantages of the corporation as compared with the partnership—namely, permanence, easily transferable shares, greater ease in raising capital, delegation of authority to authorized agents, and ease in functionalizing the management. The great disadvantage is the unlimited liability feature; from the standpoint of the law these associations lack separate personality.

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[10] The bond indenture for an issue by the Adams Express Company provided limited liability under the following terms: "No present or future shareholder, officer, manager, or trustee of the Express Company shall be personally liable as partner or otherwise in respect to this bond or the coupons pertaining thereto, but the same shall be payable solely out of assets assigned and transferred to the said Trust company or out of the other assets of the Express company." In Hibbs v. Brown, 190 N.Y. 167, among other things, the question arose as to whether this specific stipulation against the personal liability of members made the bonds non-negotiable. Two of the judges specifically stated that the above clause was against public policy and so void, although concurring with the majority that the bonds were negotiable (pp. 191, 193).

The unstable membership prevents this liability from adding greatly to the credit standing as it does for the general partnership when partners have large resources outside of the business. The feature merely constitutes a possible danger to the investor.

Since the only advantage of the joint-stock company over the corporation lies in a very moderate saving in taxes and somewhat greater freedom from regulation and rendering of reports to the Government, its disuse in the United States is not difficult to understand. Most of the exceptional cases where it is found are associations formed under the New York statute, of which the most notable are the great express companies.[11] In England, joint-stock companies are much more common They are easily formed under the Companies Act and are less expensive to organize than the limited liability type.

The Limited Partnership

General nature. The limited partnership is probably the most frequently used modification of the general partnership. The organization is formed by an agreement between one or more general partners and one or more limited partners. The general partners operate under the usual law governing general partnerships. The limited partnership is formed under the statutes of the state and not the common law.[12]

Unlike the general partnership, the limited partnership must file a certificate or articles disclosing such information as the name of the partnership, the character of the business, the place of business, the name and residence of each member, the duration of the partnership, a careful description of the original capital contribution and liability for any additional contributions of the limited partners, and the' compensation of the limited partners and the terms of their withdrawal. This requirement of filing and publication, as well as the other provisions of the act, are designed to protect the position of creditors. In order further to protect creditors, it is required that every precaution must be taken to prevent their mistaking limited for general partners. The names of limited _partners must be excluded from the name of the_ concern; they musirial be held up to the public as general partners; they

[11] The Adams Express Company, organized in 1854, disposed of its express business to the American Railway Express Company (a corporation) in 1918, and has continued as an investment company. The American Express Company, another early joint-stock company, was taken over by the American Railway Express Company in 1918.

[12] The Uniform Limited Partnership Act, which is followed in the discussion in these pages, is in force in 19 states, including such commercially important jurisdictions as Illinois, Massachusetts, New Jersey, New York, and Pennsylvania. States not using the Uniform law have their own individual statutes. Only Arizona and Florida make no provision for this form of organization.

can make no contracts, can never act as general agents, and can have no voice in the management.

Since they are owners and not creditors, limited partners must be careful that any compensation or other withdrawals be kept within bounds, so as not to injure the position of the creditors. The law provides that they must not withdraw any compensation, share in the profits, or investment unless there is sufficient property left in the business to pay all liabilities.

Other rules governing the operation of the limited partnership follow naturally from the position of the limited partner as a part owner without voice in the management. Because he plays no active part, he may assign and sell his interest so that another may substitute in his place without causing the dissolution of the partnership. Dissolution will occur only according to the terms of the agreement or by virtue of the usual acts by general partners which end a general partnership. A limited partner can, however, demand dissolution if he fails to get back his contribution at the time stated in the terms of the agreement. In the absence of a specific provision, he may demand the return of his contribution in writing, and, if after waiting six months he is unsuccessful, dissolution may be lawfully required. Because a limited partner plays no active role, his incapacity should not serve to dissolve the organization, as in the case of a general partner, and his interest should be and is transferable. When such a partner's interest is assigned, however, the substitute, while entitled to a share of the profits or other pecuniary rights, cannot require information about business transactions nor inspect the books or accounts unless the privilege is granted by all the partners, or unless the original certificate gives the assignee that right. In case of death, the estate of a limited partner, as represented by the executor or administrator, occupies virtually the same position as a buyer of the interest involved.

Summary as to merits and use.[13] The limited partnexshix_ arrangement, by creating a limited increases the os- Bible _m size of the_partnershiP organization wit} tit resorting to the corpOratefOrm. The contributing c ltalist might very well refuse to make the desired advance and assume the possibly large risks of the business on a straight loan basis, for which he could collect only a modest rate of interest without incurring the penalties of the usury law. Without the limited liability the risk involved might well be too great to outweigh the hope of profit. From the standpoint of the business the limited partner-

[13] "A detailed account of the origin and effectiveness of the limited partnership is provided by S. E. Howard, "The Limited Partnership in New Jersey," *The Journal of Business of the University of Chicago,* October, 1934, p. 296.

ship arrangement may be more advantageous than an ordinary loan. It is true that the limited partner is usually given a position of priority like that of the creditors, but subordinated to them, and allowed to share in the profits instead of collecting a rate of interest that presumably would be smaller, but the funds he contributes are ownership funds and so expand the security of creditors, making possible increased credit from both merchants and banks. An ordinary loan, by increasing the burden of liability, would presumably reduce the line of credit with merchants and banks which had been available before.

The limited partnership, then, may be thought of as a device for increasing both the owned funds and the credit of the sole proprietorship and the general partnership to a certain extent. Otherwise it does not greatly change the advantages or disadvantages of these very personal forms of organization as they compare with the corporation. The disadvantages of impermanence, of liability of the general partners, and of difficulty in raising large sums of capital still exist. In addition, the limited partners are likely to be treated as general partners in states other than the state of formation. The limited partnership interest itself is legally transferable, but practically it is much less salable than the better-known and more widely distributed shares of a corporation. The smaller taxes, most important for small business units, and the relative ease of formation and dissolution remain as the chief advantages of this modified form of the partnership as compared with the corporation. The limited partnership would be used by the same types of business that employ the general partnership. Ordinarily the funds that could be added by taking in limited partners would be confined to those of persons who knew the general partners well and had confidence in their ability and integrity.

The Joint Venture

Nature and use. The joint venture, or joint adventure, is sometimes spoken of as a "syndicate" or a "deal." Save for some legali technicalities which are of distinctly minor importance for the' purpose of the businessman, this form of organization is best thought of as a partnership modified in the following respects:

1. Limited to a single deal or undertaking as opposed to conducting a continuing business.
2. Limited in duration, usually by the terms of agreement, so that the venture is terminated after a stipulated period even if it has not been successfully completed.
3. Centralization of authority in a manager in whose name the business will be conducted.

Perhaps the most picturesque use of the joint venture is found in the truly adventurous trading voyages in the days before steam and a large body of geographical knowledge eliminated the major hazards. In financial circles this form of organization is used today by a group or syndicate, acting through a manager, to purchase a block of securities from a corporation or government and to merchandise it, ordinarily within a very short time.[14] Upon the completion of the successful distribution, the manager is paid a commission and the net profits are divided according to the prearranged scheme. When the venture is unsuccessful, the original duration may be extended or the unsold securities may be taken up by the participants and losses or ostensible profits divided. It is customary in joint ventures to pay those participants who contribute personal effort, as the manager, a stipulated amount and to divide any profits or losses among the participants in agreed proportions, generally in the ratio of their capital contributions or their assumption of risk.

The Mining, Partnership

Characteristics. Mining partnerships are chiefly of interest not because of their numbers or financial importance but because they illustrate the manner in which the principles of partnership operation have been modified by custom and necessity, without the aid of legislation, at least in the first instance, to meet peculiar circumstances. Whereas the character of the corporation has been created by statute, the mining partnership has been generated by a special need, which has crystallized into common law through custom. A few states, like Montana and Idaho, where mining is'important, now have statutes governing and clarifying the status of the mining partnership. The origin of this form of organization is traceable to the early mining communities in the West. In such pioneer mining camps the law was unsettled. The continuous movement of miners from one locality to another and the nature of the work of mining combined to produce rules more conformable to mining conditions than those of the general partnership. In order that the mine might be kept in good operating condition, it was necessary to have continuous operation. An impermanent form of organization, like the general partnership, could easily result in undue losses through its termination as the result of the incapacity or acts of any one of the partners. A corporation, because of its formality and legal requirements, did not fit the simple needs of the situation, and hence custom created the rules of the mining partnership.

_A mining partnership permits the co-owners to be partners only

'See pp. 340-343.

in the profits, the mine owners being "tenants in common," and the, mtheis not partnership property. When ownership is by co-tenants, one party is allowed to sell his share to a third person without the consent of his co-owners and without the dissolving of partnership, since the profits follow the property. The method of transfer does away with *delectus personae,* so that there is no relation of trust and confidence, and one partner cannot bind others by act or contract; even the partner who is placed in charge as manager can bind the partnership only for necessary labor and supplies and cannot give a binding,note unless expressly authorized by the other partners or permitted by usage. Partners are liable for such debts as are properly .incurred during the period of their ownership and sometimes until, the creditors have been given notice of the partners' retirement.[15]

When_twoor more persons own or acquire a mining claim for the purpose of working it and do actually engage in operating it, a minmg–partnership will arise by operation of the law and withbut any 'ffitten agreement. Under such an informal arrangement, the cease -ofwork by one of the partners dissolves the partnership relation with respect to him. The mine may be owned by one of the partners, and the mining partnership may apply solely to the profits of operation. The agreement may, however, be, formally drawn up in writing, and stock can be issued to represent the different proportions held by the owners.

Comparison with joint-stock company. The mining partnership closely resembles the joint-stock company in its most important aspects—llamely, anence, tran_slerable shares, absence of *delectus personae,* centralization of authority in a manager, and unlimited liability for properly incurred business debts. Its unusual nature lies in the possibility of Its arising, spontaneously by the operation of the law when two or more engage in mining, much as two or more persons in any other business might find themselves general partners by merely operating a business jointly and appearing to the world as such, whereas the joint-stock company requires the execution of a formal written agreement.

The Partnership Association

General nature. In four states—Michigan, New Jersey, Ohio, and Pennsylvania—the partnership association or limited partner-

[15] The law of the mining partnership is found in Scott Rowley, *Modern Law of Partnership* (Indianapolis: Bobbs-Merrill Company, 1916, 2 vols.), Sections 152, 153, and 1048. *The Encyclopaedia of the Social Sciences* indicates that the mining partnership of Anglo-American law is paralleled by the *Gewerkschaft* for mining operations in Germany (Vol. 10, p. 514). A feature of this form is that, because of the indeterminate capital requirements of the industry, the partners may usually be called upon for more money by majority vote.

ship association has been created by special statutes giving a form of organization very closely resembling the corporation.[16] Like the latter, it may be formed by three or more persons drawing up suitable articles of association, filing them with the secretary of state and the county clerk, and paying the organization tax. After the incorporators have properly done their work of organizing the association, the owners of the new business find themselves in the same position as corporate stockholders; that is, their interest is represented by shares of stock, and they have no liability beyond the subscription price.

The business of the association is conducted through a board of directors or managers, who are chosen at the annual meeting of the stockholders. In Michigan the cumulative voting power is employed in the election of the managers in order to insure representation of substantial minorities.'" A peculiar feature of the powers of these managers is the requirement that at least two of them shall sign every contract incurring a liability for an amount exceeding $500 or the association shall not be bound, except that, in the case of associations which buy and sell merchandise, a single manager selected by a majority of the stock may perform the purchasing function, making contracts and signing notes for them.

Comparison with corporation. The chief difference between the partnership association and the corporation is in connection with the transfer of stock. While the association's stock is freely transferable under the rules described by the association, a transferee is entitled to the voting privilege only after election by a majority of the members as well as a majority of the shares. If, however, the person acquiring stock should fail of election, he has the right to demand that the association purchase his interest, and, if they cannot agree on price and terms, the court will appoint an appraiser to act.

A partnership association, although it resembles the corporation very closely, has but little to offer in the way of superior attraction. It may enjoy slightly reduced taxes at the hands of the state in which it is formed, and voting control cannot pass into new hands without the consent of the old stockholders. In view of the right of a new stockholder to demand the purchase of his shares, an association without an excess of cash or credit might very well be obliged to grant the voting privilege or else face dissolution. A serious disadvantage of the association, if it intends to do business in foreign states, is the inclination of the courts to

" A good account of this form and the experience with it in New Jersey is provided by S. E. Howard, "The Limited Partnership Association in New Jersey," *The Journal of Business of the University of Chicago,* July, 1936, pp. 258-279.

[14] For an explanation of cumulative voting, see pp. 65-67.

treat it as a general partnership outside the state of formation. Under the circumstances this form of organization is likely to be limited in application to small businesses operating solely in the state in which they are organized.

CHAPTER 4

THE FORMATION AND CONTROL OF THE CORPORATION

Introductory

SINCE the corporation is the type of organization that is commonly employed where financing is obtained from the general investment public, a brief statement of how it is organized is basic for an understanding of the major financial activities and the lines of authority which determine responsibility for those activities. Aside from the need for brevity, there are two reasons why the picture must be general: First, the business corporation laws of the several states vary in many details, some of the more important of which will be described, and, second, there are large variations in the functions of different officers. Such variations occur because of differences in personal ability and in the kind of business, save, of course, where functions are inflexibly fixed by the statute or the charter.

Historical roots of the American corporation. In England, the country from which we inherit our legal system, the right of a business group to incorporate was at first a grant of the Crown and was often associated with a monopoly in some business field. As the act of incorporation became more frequent and more power came to rest in Parliament, that body took over the function of granting charters. This procedure was adopted by the legislative bodies of the American states. Certain abuses naturally crept into the situation. The granting of a charter was often a political favor and so was open to the objections that exist with any form of political patronage. The interest of those already occupying any business field was opposed to the creation of possibly competing units. Finally, in accord with the American philosophy of equalizing opportunity, general enabling acts were passed which granted any group the privilege of incorporating a business by filing an application showing conformity with this law with the proper executive branch, usually the secretary of state.

The first of these general incorporation acts was passed by the State of New York in 1811. The chartering of business corporations, with the exception of the national banks, has been almost

exclusively the function of the several states, although recently agitation has arisen for the chartering by the Federal Government of those corporations engaged in interstate commerce.

Types of Corporations

Public and private corporations. Before describing the procedure of applying for a charter, it should be noted that profit-seeking business corporations, to which we have been referring and shall continue to refer simply as "corporations," are but one class of the family using that name. The classification on the next page shows two broad classes of corporations—public and private. The more important group of public corporations is made up of municipalities, such as incorporated cities, villages, or townships. The act of incorporation gives the community the right to perform certain governmental functions, such as levying taxes, passing and enforcing ordinances, and raising funds for improvements by the issuance and sale of bonds. A minor group of public corporations consists of government-owned projects, sometimes the result of emergency situations such as a war or serious disaster, and sometimes of business enterprise, usually limited in this country to unprofitable or hazardous activities which private enterprise does not care to undertake but which are regarded as of large importance to the general welfare.[1] Examples of the former are found in the War Finance Corporation, Reconstruction Finance Corporation, Home Owners' Loan Corporation, Federal Farm Mortgage Corporation, and Federal Deposit Insurance Corporation; examples of the latter are the Inland Waterways Corporation, Tennessee Valley Authority, and various banking and public utility projects incorporated and completely owned by the Federal Government or some of its political subdivisions.

Private corporations without capital stock are ordinarily formed in order to provide for the continuous succession of a group with changing membership desirous of carrying on non-profit-making activities which involve the making of contracts and the ownership of property. This monied or propertied aspect of the association may be modest and incidental, as in the case of religious organizations, social clubs, and fraternities. In other cases the primary object may be the conducting of a business along cooperative or mutual lines, as in the case of mutual insurance companies, building and loan associations, and the cooperative marketing agencies of different agricultural groups. Very often special groups

[1] On government-owned corporations see John McDiarmid, *Government Corporations and Federal Funds* (Chicago: University of Chicago Press, 1938), and John Thurston, *Government Proprietory Corporations in the English-Speaking Countries* (Cambridge: Harvard University Press, 1937).

of this kind have sufficient social importance, as in the case of building and loan associations, to warrant a special body of legislation regulating their organization, operation, and supervision.

CLASSIFICATION OF CORPORATIONS

- I. Public
  - 1. *Municipal.* Cities, incorporated Villages, and towns.
  - 2. *Government owned.* (Examples in text.)
- II. Private
  - 1. *Without stock,* non-profit making
    - a. *Social.* Clubs and fraternities.
    - b. *Religious.*
    - c. *Educational.* Universities and colleges.
    - d. *Charitable.*
    - e. *Mutuals and cooperatives.* Mutual insurance, building and loan associations, farm cooperatives.
  - 2. *With stock*
    - a. *Extractive.* Quarrying, mining, oil, timber.
    - b. *Agricultural* (unusual as corporations). Farming and herding.
    - c. *Manufacturing.*
    - d. *Merchandising.*
    - e. *Public service corporations.* Transportation, electric light and power, etc.
    - f. *Financial.* Banking, insurance, investment, security dealing.
    - g. *Personal Services.* Advertising, engineering, etc.
    - h. *Real Estate.*
    - i. *Holding Companies.* Hold stock of other companies for control.

Private business corporations with capital stock and organized for profit are our only concern here. The classification of this

group made in the accompanying outline is based upon financial and operating characteristics which give rise to important differences in financing. Some of these distinctions are recognized by the law, as in the case of the public service corporations, which are natural monopolies and are subject to very detailed regulation. Again, the more important types of financial institutions, the commercial banks and the insurance companies, are created under special legislation applicable only to the one kind of business and subjected to periodic examinations by government examiners. The special characteristics of these various types of business corporations will be analyzed later as they are related to various problems of finance.

Selecting the State of Incorporation

Factors involved. The initial problem connected with the actual life of the corporation is the choice of a parent. From what state shall the promoters of the corporation seek the charter which is to give the entity life and actuality?[2] If its property and operations are confined to a single state, the charter will ordinarily be sought there. If the business is commercial banking or one of the public utilities, the selection of the state of operation is usually compulsory. Even though near-by states offer advantages in the way of lower taxes and greater freedom, there will be the offsetting disadvantage of being compelled to seek readmission as a "foreign corporation" to the native state, in which the business is mainly to be conducted.[3] Taxes levied upon a "foreign" corporation under such circumstances are likely to be as great as those incurred by a domestic, or local, corporation. Any taxes levied by the outside state, then, no matter how low, will represent double taxation. Other disadvantages in going to another state for incorporation might exist in the way of less familiarity with the law because of the fact of distance from the center of operations. There might also be additional expense and bother in keeping nominal offices and records and holding certain meetings at a distant location.

Whenever a corporation carries on its business in two or more states or is a truly national organization, a problem in the choice of the state of its incorporation arises. Such a business faces almost inevitably the problem of qualifying in some states as a for-

2 A few railroad companies have multiple incorporation. The New York Central Railroad Company was organized in 1914 under the laws of New York, Pennsylvania, Ohio, Michigan, Indiana, and Illinois The Western Maryland Railway Company is incorporated in Maryland and Pennsylvania.

3 At law a corporation is "foreign" in any state other than that of incorporation. When a corporation is from another country, the legal term *alien* rather than the popular adjective *foreign* is applied.

eign corporation. The four following general considerations will be important in coming to a decision:

1. What taxes will be incurred by the corporation which will burden its treasury or serve to make its securities less attractive to the investment market?
2. Are there any legal restrictions in the state law that may be deemed undesirable?
3. Is the corporation law well developed and tested by experience, so that legal counsel may confidently interpret it when difficult situations arise?
4. Is the general attitude of the population and the legislature favorable to business and to corporations, and likely to remain so? States which are well developed industrially are much less likely to introduce harassing or unfavorable laws on short notice than are agricultural or stock-raising states or those chiefly dependent on mineral resources.

The first two of the preceding points merit further consideration because of their bearing upon finance and financial control.

Taxation. Among a number of important states the laws are so nearly alike and so favorable that little remains in the way of choice save the very important consideration of taxation.[4]

1. *Incorporation tax or fee.* The initial franchise tax or license fee, based, in most states, on the amount of authorized stock, should not be given too much consideration, since it occurs but once in the life of the corporation. An idea of its weight may be had by noting the cost in some of the different states. At one end of the scale stands Arizona with a nominal charge of $10 regardless of the size of the corporation.[5] Because of the variety of graduated scales under which the tax is levied in many states, it is difficult to pick out any particular one as the most expensive, the matter depending upon the size of the corporation. A very common charge, at least for a smaller corporation, is $1 for $1,000, or one tenth of 1 per cent, of the capital stock. Thus, Connecticut charges a flat $1 per $1,000; Florida charges $2 per $1,000 up to $125,000, with the rate thereafter graduated down to 10c per $1,000. Delaware, a very popular state, charges but 10c per $1,000 up to $2,000,000; 5c per $1,000 from $2,000,000 to $20,000,000; and 2c per $1,000 over $20,000,000. A $100,000,000 corporation in Iowa would pay an incorporation tax of $100,015; in Connecticut, $100,-

[4] For the various ways of minimizing corporation taxes, see John H. Sears, *Minimizing Taxes* (Kansas City, Mo.: Vernon Law Book Co., 1922). A summary is given in Chapter III of that work.

[5] Actually this state makes a charge for filing the necessary papers, so that the total cost is $60. With the possible exceptions of New York and Pennsylvania, Arizona has the heaviest filing charge in the Union.

000; in Delaware, $2,700, and in Arizona, $10. In each case a relatively small filing cost would need to be added. [8]

2. Annual franchise or license tax. More important because of its regular annual recurrence is this levy by the state of incorporation. In a few states, such as Indiana and South Dakota, there is no annual franchise tax; in other states it is a nominal amount. Delaware has a graduated tax which amounts to $50 for a corporation with capital stock not exceeding $1,000,000, each million thereafter paying $25. [7] Pennsylvania levies the highest rates at the present time, $5 per $1,000, but only on capital used in the State of Pennsylvania.

3. State income tax. State income taxes have become an important consideration during the last decade. At the present time these levies are found in such important jurisdictions as California, Connecticut, Massachusetts, and New York. The impetus of this movement may be ascribed to the success of the Federal income tax, which was legalized by the Sixteenth Amendment in 1913 and severely tested by the unusual fiscal needs of the Government during the World War. As compared with other taxes, it has proved unusually flexible, being susceptible of expansion or contraction with changes in the needs of the taxing unit. However, this flexibility showed its adverse side in the shrinkage of corporate incomes and so of income tax revenues during the prolonged depression of the early 1930's.

Wherever the "ability to pay" rather than the "benefit received" seems to be the fair basis for taxation, the income tax makes a powerful appeal to the general sense of fairness. From the standpoint of the corporation this tax has the advantage of proportioning the tax burden to the profits of the year, producing burdens at the time when the corporation can best bear them. [8] Perhaps a disadvantage lies in the very ease with which it is levied, but, if

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These and subsequent figures are based on 1938 rates. For current rates the Prentice-Hall, Inc., State Corporation Tax Service or the Commerce Clearing House, Inc. State Tax Guide Service may be consulted.

The computa!tions are all based upon stock with par value. Should the stock be without par value, different rates may apply, but frequently the tax per share will be found to be the same as for a share with $100 par value. The subject of par and no-par shares is treated in the next chapter.

The annual tax for Delaware is computed as follows:

Authorized capital stock not exceeding	$ 25,000... $ 5
Authorized capital stock exceeding $ 25,000, not exceeding	100,000.. . 10
Authorized capital stock exceeding 100,000, not exceeding	300,000... 20
Authorized capital stock exceeding 300,000, not exceeding	500,000. . . 25
Authorized capital stock exceeding 500,000, not exceeding 1,000,000... 50	
Each million thereafter	

'Strictly read, this statement might be criticized, for the Federal income tax is levied in the year subsequent to that in which the taxable income is earned. In 1920 some corporations were embarrassed by Federal taxes on 1919 income. Profits were large in 1919, and the tax rates were very high. Depression and losses were widespread in 1920.

this is true, it is a practical disadvantage of the corporation as such, which legislatures seem to be able to harass with a minimum of public complaint, rather than a fault of the income tax principle. Corporations object to the tax as an additional burden levied without any compensating relief from other taxes, pointing out that, if the net income of the corporation is taxed and then the same income is taxed again in the hands of the owner when it is distributed as dividends, there is double taxation. In contrast, the business net income of a sole proprietor or partnership would be subject to but one tax, levied not upon the business unit but upon the owners for their respective shares.

Out of some thirty-odd states using the income tax, several, including California, Connecticut, Montana, New York, and Wisconsin, have made it a complete substitute for the usual tax on capital stock. While there seems to be a trend toward the increased use of this tax as a source of state revenue, the well-known tendency of state legislatures to spend easily from the public purse makes it not improbable that other states will make the income tax an additional rather than a substitute source of revenue. In fairness to the corporation it would seem only proper to relieve it from one burden when giving it a new one. Moreover, to increase tax burdens unduly will tend to drive such corporations as are able to move to incorporate in less greedy states.[9] The desire to retain patronage already gained is likely to make a popular state such as Delaware relatively conservative in increasing the corporate tax burden.

As with other taxes regularly levied on an annual basis by the state of incorporation, the income tax tends to encourage migration to other jurisdictions. Unlike the ordinary type of annual franchise or license tax, which is based upon the amount of capital stock, the burden of income tax, being based upon profits to be realized later, is a matter of conjecture at the time of incorporation. This uncertainty makes difficult a comparison of states using this tax with states using other bases. A corporation unlikely to show anything but nominal profits would find the income tax particularly advantageous, for it would go tax free. For a corporation with more normal earnings, a comparison between a state with an income tax and one levying a tax upon capital stock might be made by assuming the most probable rate of profit on capital employed at some rate such as 10 per cent. If the given

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As to the possibility of migration of corporations to other states, the case of West Virginia is in point. Prior to 1901 West Virginia had low rates and a large share of the cheap incorporation business. Seeking to increase revenues, it materially raised rates and speedily lost its popularity and its former patronage. Thomas Conyngton, *Corporation Procedure* (New York : Ronald Press Co., 1923), p. 56.

state levied an income tax of 3 per cent, the tax would amount to 30c per $100 ($100 x 10% x 3%), or $3 per **$1,000,** of capital stock, if it is assumed that the amount of taxable capital stock and the capital employed in operation, as used in the computation, were equal.

4. *Miscellaneous taxes.* Of the remaining taxes paid by the corporation, the general or real property taxes and sometimes the occupational tax are most important. An occupational tax will depend on the kind of business pursued. Taxes on real estate and personal property are ordinarily assessed and levied at the place where the property is located.[10] Since these have nothing to do as a rule with the corporation as such, but would be levied upon any owner, they are not a determining factor in choosing the state of incorporation and require no special consideration. Such taxes might, however, influence the location of an industry.

Possible unfavorable legal restrictions. What legislative restrictions will be regarded as undesirable will depend upon the ideas of the incorporators. Those points which are most commonly considered may be listed here to indicate to the layman the need for legal counsel familiar with the corporation laws of the various states.[11]

1. *Limitation of stockholders' liability.* The universal rule is that the stockholder shall not be liable after he has paid the full par value of stock subscribed for. Until **1931,** California held a stockholder personally liable for such proportionate part of his corporation's indebtedness during the period in which he was stockholder as his stock bore to the total capital stock of the corporation. Until **1930,** stockholders of Minnesota corporations (other than those engaged in manufacturing) were subject to double liability. The constitutional provision providing for double liability was repealed when it became apparent that it failed to provide the security for creditors which had been expected and that businesses were obtaining charters in other states, where the laws were less stringent. The stock of some state banks is subject to

[10] Conyngton mentions an interesting exception in the case of a New York corporation operating principally in euffalo which by designating an obscure little hamlet as its "principal place of business" in its charter was able to reduce its personal property tax to considerably less than it would have been if it were assessed in the larger city. Such a saving is possible in those states in which a corporation is taxed on its personal property at the place where its principal place of business, as fixed by its charter, is located. Thomas Conyngton, *Corporate Organization* (New York: Ronald Press Co., 1913), p. 68.

[11] A point frequently included in such lists as this is that of the power to issue stock for property or services. In the past there has occasionally been some question as to the propriety of issuing stock for other than a cash consideration. Today every state permits the issuance of stock for property, and all but two for services. Of these two, New Mexico forbids the practice, and West Virginia is silent on the subject.

double liability, a feature that was abolished for national banks by the Banking Act of 1933.

2. *Qualifications of incorporators and directors.* About one fourth of the states require that some of the incorporators and the directors be citizens of the state. Since the position of the incorporator is nominal and temporary, persons who are merely figureheads might be used to fulfill the former requirement. The same device might be employed in the case of directors, but this practice would generally be regarded as very undesirable; chiefly because of the greater importance of the director's position.

Another requirement may be that directors must own a certain number of qualifying shares, but ordinarily the minimum amount stipulated is nominal.

3. *Place of corporate meetings.* Almost all of the states permit directors to hold meetings outside the state, but less than half permit the holding of stockholders', meetings out of the state. This restriction upon the location of stockholders' meetings would not ordinarily be a serious disadvantage for a large corporation, since very often the meeting merely goes through the formality of voting proxies of stockholders who would be absent in any case." For the corporation of modest size the requirement that a meeting be held in a distant 'state might be disadvantageous because of the expense and the time of officers consumed in travel. If the attendance of stockholders is at all likely or desirable, this consideration becomes even more important. Of three states frequently considered desirable for incorporation—Delaware, Maryland, and Maine—only Maryland requires the stockholders' meeting to be held in the state.

4. *Owning stock in other companies.* Whereas formerly corporations were not permitted to own stock in other corporations; the power is now generally granted. In some states, however, the privilege is limited, and if it is to be exercised, the laws on this paint should be scrutinized."

5. *Stock without par value.* The use of stock without par value is, a recent development but has grown so rapidly that only a very small minority of states, and those of small commercial importance, have failed to provide for this very popular financial instrument, the merits of which are considered in the next chapter.

6. *Voting and subscription rights of stockholders.* Very often promoters who expect to obtain money from public financing wish freedom in creating the kind of stock to be offered to the public. They may wish to concentrate voting power in a small issue of stock, to be held by themselves and their associates. Some states,

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'See p. 79 for a discussion of proxies.

"See pp. 612-613,

like Delaware, permit the creation of nonvoting stocks; others, like Illinois, require all stock to be voting. Promoters may also prefer to be free to offer stock to the general public without first offering it to existing stockholders, as is generally required under the common-law pre-emptive right. These rights of the stockholder to control his corporation are discussed later in this chapter.

7. *Ease in corporate change and powers of directors.* Certain actions, such as selling the whole property, amending the charter, or mortgaging the real estate, are of such first-rate importance as to be subject to special restrictions. In the states with less rigorous laws, a bare majority of the stockholders might accomplish the first two and the .directors the last. Sometimes a larger proportion of the stockholders is required to take favorable action in such matters. Some restrictions are wholesome and reasonable, and some states may well have erred on the side of laxity, but, since most restrictions of this sort are merely minimum requirements, a corporation may limit itself through its charter in order to give its stockholders and creditors proper protection. In general, incorporators or promoters who are later to be the directors will choose to give themselves as directors a maximum of freedom, having ample confidence in their own morality and sagacity. While lax legal restrictions are not ordinarily the dominating consideration in the choice of the state of incorporation, it is true that the states which have actively sought corporation business by "liberal" laws have placed excessive potential powers in the hands of directors at the expense of stockholders. [14] One of the major arguments for the Federal incorporation of corporations doing an interstate business is the elimination of unhealthy competition among charter-mongering states that reduces the quality of restrictions that should exist to protect the investing public. [15]

"For a thorough study of the rights and powers of stockholders and directors of Delaware corporations, see R. C. Larcom, *The Delaware Corporation* (Baltimore: The Johns Hopkins Press, 1937).

" The so-called "liberal" features of the Delaware incorporation law may be summarized as follows:

1. Any kind of stock may be issued. It may be nonvoting and without pre-emptive rights.
2. No state tax' is levied on issuance or transfer of securities.
3. Meetings of directors and stockholders may be held outside the state.
4. Vacancies on the board of directors may be filled by a majority of the remaining directors (the stockholders of 10 per cent of stock may petition the chancellor for a summary election).
5. The directors may allocate part of the consideration received for no-par stock to surplus.
6. Directors need not be stockholders.
7. Directors may issue new stock, change the preference on unissued stock, retire preferred stock, and change the bylaws if the charter so permits.
8. Profits for the current year and the preceding fiscal year are available for dividends even though the surplus account shows a deficit, provided that capital stock with preference as to assets is not impaired.

In concluding a survey of the factors governing the choice of a state, the importance of its laws other than those that relate to taxes must be given ample weight. In spite of the economy appeal, such a bargain-counter state as Arizona is not likely to attract any large number of substantial and well-financed corporations.[16] If the enterprise is temporary or exceptionally speculative, the low tax appeal may be sufficient. Possibly a small, well-acquainted group who did not care for public participation might be similarly inclined. Aside from the reputation of some of the bargain-counter states, the large corporation must consider a long-run future in which the destiny of goodly sums of property will depend on the interpretation of some point of law. At such times a well-formulated body of law, the exact meaning of which has been interpreted by numerous court cases, becomes invaluable; consequently those states whose laws have been repeatedly tested over a number of years by many corporations and are least likely to change radically because of the large vested interests involved are most desirable for incorporation.

" An examination of 606 industrial companies listed on the New York Stock Exchange in 1932 reveals the current popularity of Delaware, and, to a much lesser extent, of New York and Maryland. Of the 238 corporations in this group formed from 1920 to 1930, 138 went to Delaware, 27 to New York, and 17 to Maryland. The importance of New York is due to the large number of industries which have been started and still have most of their plants and other property in that state. Industrial importance has also resulted in initial incorporations of important companies it New Jersey, Pennsylvania, Michigan, and Illinois.

Prior to 1914 and the passage of the "Seven Sisters" acts (antitrust legislation), New Jersey was the favorite state for large incorporations with scattered properties. Of its total of 87 in the group below, only 12 were taken out *after* 1914; of Delaware's 209 only 17 were taken out *prior* to 1915. Federally owned corporations have also employed the Delaware charter, as in the case of the Food Administration Grain Corporation (Wilson), Flood Credit Corporation (Mississippi flood relief under Coolidge), Grain Stabilization Corporation (Hoover), and Commodity Credit Corporation (Roosevelt).

STATE OF INCORPORATION—INDUSTRIAL COMPANIES LISTED ON THE NEW YORK STOCK EXCHANGE, 1932

State	*Total*	*Per Cent of Total*
Delaware	209	34
New York	99	16
New Jersey	87	14
Ohio	29	5
Pennsylvania	28	5
Virginia	24	4
Michigan	23	4
Maryland	22	4
Illinois	17	3
Massachusetts	15	2
Maine	13	2
Miscellaneous	40	7
Totals	606	100

Source: R. C. Larcom, *op. cit.,* p. 175.

CERTIFICATE OF INCORPORATION
OF
WALSTRUM CORPORATION

First—The name of this Corporation shall be
"WALSTRUM CORPORATION"

Second—The location of its principal office in the State of Delaware shall be in the City of Wilmington, County of New Castle. The agent in charge thereof shall be the Wilmington Trust Company at 200 West Main Street.

Third—The objects for which the Corporation is formed are :

(a) To manufacture, import, export, buy, sell, or otherwise to deal in household equipment, furniture, fixtures, supplies, and merchandise of all sorts.

(b) To acquire by purchase or otherwise, to lease or otherwise obtain the use of, to own and to use, to sell or otherwise dispose of, to license or otherwise grant the use of such patents, trademarks and processes as may appear to be in the interest of this Corporation.

(c) To purchase, lease, construct or otherwise acquire land, buildings, furniture and fixtures in Delaware or elsewhere and to sell, sub-lease or otherwise dispose of such portions as may serve the use or interest of this Corporation.

(d) To acquire by purchase or otherwise and to hold or dispose of stocks, bonds or any other obligations of any corporation; to aid in any manner any corporation whose securities are so held by guarantee or otherwise; to exercise all the rights, privileges or functions ordinarily incident to such holding; the foregoing either for investment or to further the other purposes of this Corporation.

Fourth—The total authorized capital stock of the Corporation is one hundred thousand dollars ($100,000.00) divided into one thousand (1,000) shares of the par value of one hundred dollars ($100.00) each.

The amount of capital with which this Corporation will commence business is the sum of one thousand dollars ($1,000).

Fifth—The names and places of residence of each of the original subscribers to the capital stock, and the number of shares subscribed for by each, are as follows :

Names	*Residences*	*Number of Shares*
Carl 0. Walstrum	Chicago, Ill.	8
James R. Hawkinson	Parkers Prairie, Minn.	1
Lloyd D. Herrold	Minocqua, Wisc.	1

Sixth—The existence of the Corporation shall be perpetual.

Seventh—The private property of the stockholders shall not be subject to the payment of corporate debts to any extent whatever.

It is the intention that the objects, purposes, and powers specified in the third paragraph hereof shall, except where otherwise expressed in said paragraph, be nowise limited or restricted by reference to or inference from the terms of any other clause or paragraph of this certificate of incorporation, but that the objects, purposes, and powers specified in the third paragraph and in each of the clauses or paragraphs of this charter shall be regarded as independent objects, purposes, and powers.

We, the undersigned, being all the original subscribers to the capital stock hereinbef ore named, for the purpose of forming a corporation under the laws of the State of Delaware, do make, file, and record this certificate, and do certify that the facts herein stated are true ; and we have accordingly hereunto set our respective hands and seals, this tenth day of August A.D. 1930.

Carl 0. Walstrum (seal)
James R. Hawkinson (seal)
Lloyd D. Herrold (seal)

In presence of
H. L. Perry
L. K. Montgomery

(Acknowledgment of signatures before Notary would be appended here.)

Figure 2. Certificate of Incorporation.

The Corporate Charter

Meaning and content. After selecting the state of incorporation, the incorporators are ready to prepare and file an application for a charter with the proper state official. This application, called the certificate of incorporation, contains all the information which is to constitute the charter, and, when accepted by the state, becomes the charter, or articles of incorporation. Because the content of this certificate is governed by the laws of the state of incorporation, generalization is difficult. Figure 2, however, indicates the usual formula employed.[17]

Charter provisions examined. In the following discussion each of the provisions of the certificate of incorporation is taken up in detail.

1. *Name of corporation.* A good corporation name is a matter of business judgment. Its advertising value may be increased by brevity, novelty, and ease of pronunciation, but it is also a possible financial advantage to identify the corporate name with the trade name of the product when the latter has wide prestige. Favorable familiarity is likely to aid in the disposal of securities. Appreciation of this principle is found in the retention of the name of Gold Dust Corporation (now Hecker Products Corporation) rather than American Linseed Company in the consolidation of those two companies in 1928.[18]

2. *Principal office.* The naming of a principal office, which need not be the actual chief place of business, within the state of incorporation, is a purely formal matter unless personal property taxes are affected." This "principal office" offers a known place for the mailing of notices and the service of legal papers. If the corporation has no convenient office within the state, a convenient legal representative may be selected who will hang out the necessary sign and receive any communication for the company.

3. *Purposes.* Because the corporation is a wholly artificial person created for special purposes, these purposes must be adequately

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17 C. W. Gerstenberg, *Materials of Corporation Finance* (New York: Prentice-Hall, Inc., 2nd ed., 1915), gives the certificate of incorporation for the Atchison, Topeka, and Santa Fe Railway Company (p. 54), of the United States Steel Corporation (p. 59), and of a corporation with shares without par value (p. 43).

IS This principle, like most business principles, must be applied with discretion and is subject to differences of opinion. Postum Company, for example, after embarking upon a policy of purchasing a line of nationally advertised trade-marked foods, decided to change its name to General Foods Corporation in 1929. To have changed the name of the lines purchased would have resulted in loss of carefully built up consumer goodwill; to have continued the old corporate name might, by suggesting too narrow specialization, have reduced the possible attractiveness of the securities of the company.

" See p. 55.

set forth in its birth certificate. If this is not done, the corporation may be prevented by stockholders or interested outsiders from carrying out any attempted *ultra vires* acts (that is, *acts beyond the powers* of the corporation) until the charter has been suitably amended. In some states a very simple statement is sufficient, many other activities being assumed to be granted as incidental and necessary to the carrying out of the general purpose. These incidental powers are said to be "implied," since they are necessary in the ordinary course of business for carrying out the powers expressly stated. In other states a very full and comprehensive statement must be made, a task not always easy for the layman. [20]

4. Capital stock. The charter will state the total amount of stock which the corporation is authorized or permitted to issue, and its special features if it is divided into classes. These features will have to do with priority in the payment of dividends, priority in the sharing of assets in the event of dissolution, protective provisions, and voting rights. [21]

Whenever the state tax is levied upon the authorized rather than upon the paid-in capital stock, the amount stated in the charter should generally be limited to immediate requirements, since later needs for increased capitalization may be cared for by amendment of the charter. Of the authorized total only such nominal amounts need be subscribed for at the time of the application as are required by the state statutes. In the foregoing illustration the incorporators subscribed for $1,000, which is the minimum with which business may be begun under the Delaware law (General Corporation Law of Delaware, Sec. 5).

5. Incorporators and directors. The several states vary in their requirement as to names and residences of incorporators and directors. In the case chosen only the incorporators and the amounts of their subscriptions were needed. Frequently, where all of the incorporation details are being cared for by special legal counsel, who wish to relieve their principals of all effort possible, the incorporation may be carried through in the name of clerks with a purely nominal amount subscribed. After the corporation has been duly organized, the completed legal product is turned over ready for the installation of the principals and the beginning of operations.

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[20] The classic example of the broadly stated charter is that of the United States Steel Corporation (New Jersey, 1901), which, by a plentiful sprinkling of the phrases "or otherwise" and "or any other," probably leaves no action permitted to the ordinary business corporation uncovered. The American International Corporation (1915) has a very broad charter, so that it may engage in practically any kind of business except banking and the operation of public utilities.

[21] The various kinds of stock and their usual characteristics are discussed in the next chapter.

6. *Duration.* The usual custom is to state the life of the corporation at the maximum permitted by the state of incorporation. Many states permit perpetual charters.

7. *Other charter provisions.* Other provisions may be included in the charter for the following reasons:

(a) Because there are statutory requirements with respect to the certificate of incorporation (for example, in the foregoing charter the seventh provision, relative to limited liability, is required by the Delaware law) ;

(b) Because it is necessary in order to protect the interests of the corporation or its stockholders, as in the case of a long statement of purposes;

(c) Because restrictions are sought upon the permissive powers of directors under the statutes, which are deemed too broad;

(d) Because it is deemed desirable to fix powers of directors with clarity along the broadest lines permitted by the state.

In general, a well-drawn charter will seek (a) strict accordance with the law, (b) a broad statement of powers that will permit as large a measure of freedom as is consistent with the best interests of the corporation, and (c) a minimum of matter in the interest of simplicity and freedom for change. The last point means the relegation of detail to the bylaws, where the changes may be more readily made as the needs of the organization change.

Before passing to the subject of bylaws, a word of caution may not be out of place. A well-informed management does not attempt to substitute its efforts for those of proper and qualified legal counsel. A knowledge of fundamentals is necessary, however, in order to appreciate the legal aspects of this first step in the corporate existence. An intelligent preliminary statement of the requirements of the business situation is needed to guide the final formulation by the legal staff.

The Bylaws

Organization meetings. Before the corporation is ready to transact business, most states provide that meetings of stockholders and directors be held. At their first meeting, the incorporators or original shareholders adopt the bylaws (unless this is reserved for the action of the directors) and elect the directors. At the first meeting of the directors, held in conformance with the bylaws, the incorporators' subscriptions to stock are accepted, the form of the stock certificate is adopted, and other business transacted, such as decisions with respect to the issuance, of stock for property. [22]

22 For such details, which require uniformity with the law, see E. F. Donaldson, *Business Organization and Procedure* (New York : McGraw-Hill Book Co., 1938), Chapter XXI

Nature of bylaws. The bylaws may be best described as a statement of those specific details essential for proper corporate action which are omitted from the charter. The corporation may be said to be regulated first by the general laws of the state, second by the charter, and third by its bylaws. As the charter is subordinate to and must be governed by the laws of the state, so the bylaws must be in strict conformity with both the state laws and the charter. In order that they may be used as a complete body of working regulations, they frequently repeat points from the corporation law and from the charter.[23]

Provisions of bylaws. Provisions most commonly found in the bylaws are the following:[24]

1. Regulations for issuance and transfer of stock. The directors may be empowered to delegate the physical work of transfer to specialized agents, who maintain offices in convenient centers such as New York and Chicago.
2. Stockholders' meetings. Regular and special stockholders' meetings require a statement of the time, place, method of notifying stockholders, the date as of which the list of stockholders eligible to vote shall be made up, the number constituting a quorum, and the method of voting.
3. Directors' meetings. The time, place, and quorum required are usually stated.
4. Election and qualifications of directors.
5. Officers to be elected by directors and a statement of their duties and the limitation upon their activities.
6. Standing committees. These committees are selected by the board of directors from among their number to perform special duties connected with the directors' functions. In a business with a small board actively connected with the management of operations, there might be no committees. For the large number of corporations with a somewhat larger board, which meets at the usual monthly intervals, a single standing committee, called the executive committee and made up of a few of the more active directors, would serve to care for special problems that would require action during the intervals between meetings.

The bylaws of the United States Steel Corporation, illustrating the practice of a large company, are given in Gerstenberg, *op. cit.,* pp. 66-79. This reference work also illustrates the organization papers of a corporation, including minutes of organization meetings (p. 80), and minutes of the first meeting of the board of directors (p. 83). Manuals such as W. H. Crow, *Corporation Secretary's Guide* (New York: Prentice-Hall, Inc., 1935) and *Corporation Treasurer's and Controller's Guide* (New York: Prentice-Hall, Inc., 1927), discuss the matters ordinarily dealt with in the bylaws.

A valuable service kept up to date by supplements and dealing with practice on points such as these covered by the bylaws is *Corporation Management Service* (New York: Prentice-Hall, Inc.).

7. Care and management of property and finances, including such matters as limitations on debt, care of cash and bank deposits, and dividend distributions.[25]

Of the foregoing matters covered by the bylaws, three merit particular attention: (a) the different methods of voting at stockholders' meetings, (b) the features of the directors' work which are of particular interest to those concerned with the financing, and (c) a short list of the usual officers and their functions in the management of the corporation.

Voting and Control

Use of the voting right. Through the right to vote at the annual meetings, the stockholder, as owner, exercises his right to control the destinies of the corporation. Here he elects his representatives, the directors, who guide and control active operations through the officers. On a few major matters, such as the sale, merger, or liquidation of the business, the aniendment of the charter, and sometimes the mortgaging of property, the stockholders even reserve the right to act themselves rather than delegate their powers to the directors. The matters upon which the stockholders must be consulted will be found in the law of the state of incorporation.

When the number of stockholders is small, their interest is likely to be considerable and their participation in meetings active. As the number grows, the weight of the individual's voting power diminishes and he tends to become inert. Among our larger American corporations the average individual's voting power is negligible, his acquaintance with the problems of the business small, and his ability to judge individual members of the management but slight. Under such circumstances a board of directors once placed in the saddle is well-nigh self-perpetuating and permanent. Only a major scandal or financial embarrassment to the extent of a reorganization is likely to loosen its hold on the reins of control.

A very real problem of control has thus been created by the growth of the corporation and the diffusion of voting power over large scattered groups of stockholders. In theory the interest of the stockholders in profits induces their selection of competent and efficient men. But, if self-perpetuating dynasties are created,

[25] The subject of the management of income and dividends is taken up in Chapters 21 and 22. As an illustration of the need for knowledge of the legal requirements, attention is called to the former New Jersey statute which required directors to distribute all corporate profits as dividends unless otherwise authorized by charter or bylaws. The conventional authorization to retain profits is illustrated by the United States Steel Cornoratlon charter, taken in New Jersey. This authorization is repeated in Sect. 6 of the bylaws. Gerstenberg, *op. cit.,* pp. 64, 78-79.

which, like the ancient lines of kings, are overthrown only because of the grossest misbehavior or by the machinations of other rulers, what guarantees of social efficiency are left in the system? The problem is a large one and will be considered again in the last chapter of this book. For the present let us study the voting technique itself.

Methods of voting. Under the common-law method of voting, each stockholder had one vote regardless of the amount of his investment. Such a method would permit a well-organized group of stockholders with but a trifling investment to override a smaller number of stockholders who might have invested practically the whole amount of the capital. A fairer system would seem to require a larger voice for those who had risked more capital. So today the practically universal statutory method of voting in this country allows each stockholder to- cast one vote for each director for each share owned, except when the stock is classified and the voting privileges of certain classes are specially restricted. Thus, if there were nine directors being elected, each shareholder could cast his ballot with a vote equal to the number of shares he holds for each of the persons he wishes to elect, up to the nine vacancies. Under this system one or more stockholders controlling one share more than half of the total can carry every question and fill every seat on the board of directors. The result is rule by those holding a majority of the voting stock, save as that majority may choose to give representation to a minority element.

A scheme of limited voting offers a compromise between these two arrangements. Thus in a schedule appended to the English Companies' Act to illustrate possible "regulations for the management of a company limited by shares" It is provided that each stockholder shall cast one vote for each share of stock held by him up to a total of ten shares; that on stock in excess of this amount to one hundred shares he shall have one vote for each five shares; and that on all stock in excess of one hundred shares he shall have one vote for each ten shares.[26] Such a scheme of limited voting, or a variation of it, might be used when permitted by the laws of the state of incorporation in order to give more weight to minorities and to encourage their interest.

Francis B. Palmer, *Company Law* (London: Stevens & Sons, Ltd., 5th ed., 1924), p. 411. Under the English common law each member, in the absence of any regulations, has one vote only. Very commonly, however, the company has regulations which provide that a member shall have one vote for every share held by him. Sometimes there is a provision for voting in accordance with a scale, as suggested above in the text. An unusual restriction of the opposite sort, which can hardly be recommended except on the grounds of petty economy, is a provision of the Eastman Kodak Company that common stockholders with less than ten shares are not permitted to vote. Otherwise the common stock is entitled to one vote per ten shares.

Cumulative voting. The most logical and effective device for giving a sizable minority representation proportionate to their holdings is cumulative voting, which might suitably be called proportional representation. Under this plan, which is permitted by most states, the stockholder is given as many votes for each share of stock as there are directors on the board. Thus in an election of a board of nine members a stockholder with ten shares would have ninety votes, which he could cumulate and cast for a single candidate. As a result of this cumulation, a minority candidate might receive as many votes as each of the several candidates of the majority, who, desirous of electing a number of directors, are obliged to divide their votes among a number of candidates. In effect, any minority with a ninth of the shares, or even somewhat less, are enabled to elect a director on this hypothetical board.

A formula has been devised for ascertaining the minimum number of shares required to make certain of the election of a desired number of directors: [27]

$$\frac{\text{Total number of shares outstanding} \times \text{Number of directors desired}}{\text{Total number of directors} + 1} + 1,$$ and dropping any fractional part of 1 in the result

According to this formula, if a group wishes to elect a majority of directors on a board of nine in a corporation whose $100,000 capital stock is divided into 1,000 shares, they will require 501 shares:

$$\frac{1000 \times 5}{9 + 1} + 1 = 501$$

Similarly, any minority controlling, 101 shares can obtain a place on the board by massing their votes for a single director. The proof of this statement may be demonstrated by comparing the voting strength of the majority element holding the balance of 899 shares, or 8,091 votes, with the 909 votes of the minority. No matter how the 8,091 votes are divided, they cannot amount to as much as 909 for each candidate when divided among nine. Even in order to tie the minority candidate, 909 votes would be needed for each of the majority's candidates; to defeat him would require 910 votes each.

From these figures it is seen that under cumulative voting the majority of the stock, instead of electing *all* the directors, elect only a *majority* of the board, at least when the number on the board

[27] See C. W. Gerstenberg, "Mathematics of Cumulative Voting," *Journal of Accountancy,* January, 1910, p. 177.

is odd, which is usual in order to prevent tie votes. As for minority representation on a board of nine, a director may be elected by controlling one more than a tenth of the shares; similarly, for a board of ten, one more than an eleventh of the shares would be needed; on a board of eleven, one more than a twelfth of the shares, and so forth.

Often the theoretical conditions implied in the foregoing discussion are not present. When, for example, some of the voting shares are- not represented at the annual meeting, the election of a given number of directors can be accomplished with fewer votes than the formula indicates, but the proportions established will still hold for the voting power present. Again, if any group attempts to elect a larger proportion of the directors than their holdings warrant, they may so scatter their votes as to permit another and smaller group with knowledge of the state of affairs to elect more than their proportion. Thus, if the holders of 600 shares divide their 5,400 votes among 9 directors, giving each 600, a minority with 350 shares might give 630 votes to each of 5 candidates and so obtain control of the board. Such a situation, however, is not an objection to the plan of cumulative voting itself, a plan which should be adopted, the state laws permitting, whenever it is felt that minority representation based upon substantial investment is desirable. As stated before, cumulative voting is a plan for allowing proportional representation. A board of directors wholly elected by the majority stockholders under the more common plan of voting might be more united and harmonious, but under cumulative voting the same stockholders would still control the board by a majority that would be subject to the constant scrutiny of minority representatives, a stimulating factor which, if it did not create undue friction and a crippling sense of caution, might well favor the long-run health of corporate profits.

Nonvoting and vetoing stock. Some part of the total stock may be made nonvoting at the time of its issuance.[28] Such an investment without voting power to protect it usually receives some special preference, such as priority in dividend payment, or other safeguards. It might also be given the privilege of vetoing those actions which might lessen its safety, such as a further increase in the amount of the issue or the creation of a debt which would take precedence.

Some states, like Illinois, do not permit the issuance of nonvoting shares. The management in such jurisdictions may accomplish its end by dividing the class of stock which is to be given control into small denominations, thereby increasing its voting strength. Thus, in a corporation with $360,000 capital stock, $300,000 of preferred shares might be given a par value of $100 each and so 3,000 votes; $60,000 of common stock could then be divided into shares of $5 par value and so possess 12,000 votes.

Nonvoting stock may, however, have no special rights or preferences and resemble the other shares in every respect save its lack of voting power. In such cases the purchaser evinces large faith in those who control the voting shares.[29] Such stock is often attacked on the grounds that investment, at least in stock, should always be accompanied by the protective power of the right to vote, and that it is dangerous to place absolute control. in the hands of those who have risked little or none of their own money.[30] Even though a stockholder does not exercise his rights, his voting power provides him with a weapon in the event of flagrant mismanagement; opposed to this is the argument that the investing stockholder is aware of his lack of rights when he makes his purchase, and bases his .decision to buy upon confidence in the management.

Furthermore, it is argued that, if the voting shares were more diffused, the possibility would always exist that some group might purchase enough stock in the open market to swing an election of directors and oust the very management which gave the stock its value at the time of purchase. Such a purchase for control would be particularly likely when (a) the corporation had concentrated all or the bulk of its voting strength in a single small issue and (b) economic conditions had greatly reduced the market value of the stock. But seizure of control would be logical where the low price of the stock was due to the fault of the management, and their ousting would make possible the restoration of earning power.. When the control of a corporation is vested in a small class of voting stock which is retained .by the management, that management does assume complete responsibility but leaves the stockholder only the doubtful remedy of selling his stock when he becomes dissatisfied, unless the corporation has been so grossly mismanaged as to warrant an action in a court of equity.

Insuring continuance of control. The individual stockholder wields the most influence and has the greatest interest in voting in the small corporation. But voting power achieves importance also in the new and the rapidly, growing corporation, where the investment required to gain control appears small in relation to

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"In the case of Dodge Bros., Inc., fOrmed in 1925 but later merged with the Chrysler Corporation, the sole voting power was lodged in 500,000 shares of Class "B" common, which in other respects had the same rights as the Class "A" shares, of which 1,934,564 shares were issued. The device was designed to give control to the investment bankers who floated the other security issues of the newly formed corporation, which purchased the property from the Dodge. estate. Similarly, the only difference between the common and the common "B" of the American Tobacco -Company lies in the lack of voting power of the former. The "B" stock shares its voting power with the preferred stock.

" For an attack on nonvoting stock, see W. Z. Ripley, *Main Street and Wall Street* (Boston: Little, Brown and Co., 1927), pp. 86-90.

the value of control. It is for such corporations that devices such as nonvoting stock or stock with only contingent voting or vetoing power, and trading on equity that employs nonvoting bonds and preferred issues, are used to the limit Cumulative voting, designed to give proportional representation to substantial minorities, is likewise important only when voting stockholders are active in exercising their privilege. In general, the larger the corporation, the more likely is the management to be a self-perpetuating group, which continues in power because of the habit of most stockholders of either ignoring or of delivering their proxies upon request. The average stockholder is either indifferent or disinclined to make changes except on the strongest provocation.

Among the methods sometimes used to maintain control after it has been obtained are (a) a charter provision that directors shall be elected for longer than one year and only a certain number elected in any one year; (b) a provision, in such states as would permit it, that more than a majority of votes be required to elect new directors, thereby causing old directors to hold over unless opposition of an unusual majority sprang up; (c) the voting trust, whereby persons holding a controlling interest deposit their stock with a group of trustees, who assure continued control by voting the deposited stock, and (d) the holding company, which is a corporation created for the purpose of holding the controlling stock of another corporation.[31]

Directors and Officers

Responsibilities of directors. The directors, duly elected by the votes of the stockholders, exercise their functions largely by supervising the work of the officers at their periodic meetings. Whereas the stockholders usually meet annually, the directors may meet monthly, and the officers and employees will carry on the daily routine. The work of the board will vary with the size of the company, familiarity of its members with operations, and the type of business, but it will normally comprise the selection of officers, the ratification of important contracts, the approval of budgets, financing, and plans for expansion, the declaration of dividends and other disposition of profits, and the consideration of questions of such importance as to warrant submission to stockholders.

Those unfortunate actions by which directors may render themselves personally liable in the course of business also help indirectly

[31] The holding company is of such importance as to be given special treatment in Chapter 25. The voting trust has been mentioned in the discussion of trusts in Chapter 3, and will reappear in the material on reorganization, where it is a useful instrument for tying up control during the period of financial rehabilitation.

to indicate their function in the routine of business. They are ordinarily liable for the following:

(a) Loss or damage resulting from *ultra vires* (that is, "beyond the powers") acts. The directors must see to it that the corporation is made to function within the limit of the purposes set forth in its particular charter.

(b) Any corporate act opposed to the general law committed with their connivance, consent, or knowledge.

(c) Lending the corporation's money to any stockholder.

(d) Transferring property to an officer or stockholder when the company is insolvent or threatened with insolvency, thus giving him preference to the injury of creditors.

'(e) Issuing unpaid or partly paid stock as fully paid. Such issuance would permit the corporation to operate with less assets than the creditors have a right to expect, while possibly depriving them of the chance of recovering from the stockholder, who may be unaware of the partially paid character of the stock.

(f) Either negligently or willfully paying dividends that impair the capital stock.

(g) Issuing any certificate or financial or other report which is false in a material way.

(h) Gross negligence. Court decisions have not been uniform as to what constitutes gross negligence, so it is difficult to determine liability from this cause in advance.

A review of the injurious acts for which directors may suffer personal loss reveals that most of these, particularly the more specifically stated ones, have to do with the protection of creditors. Only three—the first two and the last—have to do primarily with the protection of the stockholder. Since the board acts as a body, the individual director must seek relief from this burden of liability by having his dissent to any acts of this sort spread in a formal manner upon the minutes of the directors' meetings. Equally important to directors, although of no importance in a study of functions, is the fact that not only may liability for damages. spring from these acts but also actions at criminal law wherever fraud, larceny, or embezzlement exists.

Officers of the corporation. The directors are the delegated representatives of the stockholders, who oversee the corporation and its operations. Authority has to be delegated in this manner in order to avoid dissipating the energies of the owners, who, after all, are usually investing capitalists but little concerned with the routine of operation. The officers, in contrast to the directors, are corporate employees placed at the peak of responsibility. Through them the lines of authority descend until they reach the

lowest ranks, where no supervisory functions and a minimum of authority to act are found.

The president. The chief executive officer of the corporation is the president. He is responsible to the board and in turn has authority over the other officers, even though they are elected by the board. He exercises his authority over the organization either through these other officers or through the heads of departments or divisions. His work will be purely managerial in large organizations. In smaller ones he may perform some operating functions, depending upon special aptitude and interest.

The art of successful management lies in the selection of a competent staff to perform the necessary functions at economic prices and to keep this force operating with a maximum of harmony in carrying out the objects of the business. In an organization of any size, differences of opinion and conflicts of personal interest are almost certain to arise. Management must try to direct such energy to the ends of the corporation or, failing that, to see that it does not develop friction that will lessen the efficient running of the business machinery. An atmosphere of general cooperation and *esprit de corps* is invaluable.

The president is usually the chairman of the board of directors, *ex officio* (that is, by virtue of his office), although the bylaws might give the board the right to fill this position with any person who is a member of the board. Sometimes, particularly in large corporations, the chairmanship is a distinct office. In such cases the work involved by the office may require less activity than that of the ordinary officers. It will require the giving of assistance on broad questions of policy or the giving of advice on such matters as the officers may desire to confer about. As Gerstenberg suggests, this officer may serve as the "Nestor" of the corporation, the gray-haired ancient, retired from active warfare, who renders sage advice based on ripe experience.[32] The position is often held, and indeed often created for, a president retiring from the strenuous activities of that office.

The vice-president. Second in command to the chief officer is the vice-president or vice-presidents. Unlike the officer of that name in a parliamentary body, who serves only during the absence or incapacity of the president, a vice-president is likely to be the head of a division or function, such as the vice-president in charge of the Pacific Coast Division or the vice-president in charge of sales. Occasionally the office is the resting place of some person who has been important in the organization but is now retired with honor. Since the title adds little to real authority, it may be used

[32] C. W. Gerstenberg, *Financial Organization and Management* (New York: Prentice-Hall, Inc., 2nd rev. ed., 1939), p. 94.

to give prestige to someone close to the president in function. In the case of a banking organization, for example, the prestige of this title might be useful in dealing with customers. Election to this office, then, may serve either as an honor to spur to greater endeavor a person who has chief responsibility for a certain function or department, or as a prestige device either to satisfy someone of some importance who has little or no function or to facilitate the work of the individual elected.

The treasurer and comptroller. That the chief responsibilities in the matter of important financial decisions rest primarily with the board of directors is evident from the previous discussion. There are three officers, however, whose work is associated with important aspects of the financial side of the business as well as those minor details which lack of space and interest prevent considering here. These officers are the treasurer, the comptroller, and the secretary.[33] Some organizations have no comptroller, in which event the treasurer performs the combined functions of the two offices. The work most commonly thought of as belonging particularly to the treasurer and his staff is that of custody of and responsibility for all money and securities. The bylaws, in their enumeration of the duties of the office, will usually go into some detail on this point, stating that all monies shall be promptly deposited and that a sufficient fidelity bond shall be given by the treasurer and his staff to the extent that they personally handle money or securities in readily negotiable form. In a small organization he would handle receipts and sign the checks with the president; in a large one, the routine disbursements would be made by subordinate officials subject to some scheme of authorization and check. Subordinate or related functions naturally grow from this main stem: the treasurer often signs instruments with the president and exercises joint supervision over the finances with him; he must keep full and accurate records of financial operations and financial condition; he must be responsible for financial reports and statements; and he must see that all expenditures are duly authorized and evidenced by proper receipts. Other duties might include the granting of credit to customers and the collection of accounts and the handling of interest, sinking funds, and redemptions of bond issues.

When the office of comptroller exists, some of the most important functions may be subtracted from the office of treasurer. The former may assume control of accounts and reports and leave the treasurer little more than the work of receiving and disbursing monies and the keeping of the special accounts for that work. What

[33] See R. H. Montgomery, editor, *Financial Handbook* (New York: Ronald Press Co., 2nd ed., 1933). Pp. 30-65 are devoted to "The Corporate Officers."

is relatively a new function for many organizations is the work of making systematic financial plans for the future. This work is regarded by many as the most important done by the comptroller. Any estimate of the business future requires an intimate knowledge of the immediate past, which explains the close association of this planning work with the supervision of the accounting. The plan for a future period consists of an estimate of the sales and other income and a scheme of limited expenditure, the whole of which is called a *budget.*

The term *comptroller* (or *controller)* has no fixed meaning in business practice, but the person holding the position is usually an officer responsible to the president, a member of the operating committee, the chief accounting officer, and the originator and controller of the budget.

While all the work connected with money and property is subject to check and countercheck in a well-organized enterprise; it is desirable to have this work independently reviewed. This independent reviewing official, who should be entirely independent of those persons whose accounts he is scrutinizing, is known as the auditor. His work should induce accuracy and eliminate loss through dishonesty within the organization. So, although he serves within the treasury department, he will be responsible to the president or some other high official, possibly the comptroller if the latter is not directly in charge of funds.

The secretary. The principal duty of the secretary is to record the minutes of the meetings of stockholders and of directors.[34] He also will issue the notices for these meetings, keep the stock certificate book and the stock book, prepare stockholders' lists, and have custody of the corporate seal, which he uses when attesting the signature of the officers to important documents. Whenever the duties of the secretary are not too onerous, he may perform other functions. Sometimes the office is held by the treasurer.

Summary

This chapter has set forth briefly the formal steps in the organization, control, and management of a corporation. Organizing involves the choice of a state of incorporation, the preparation of an application for a charter to be filed, with the proper fees paid, the holding of an organization meeting, equivalent to the first stockholders' meeting, the adoption of bylaws, the election of directors, and, finally, a meeting of directors to elect officers. Much of this

[34] The importance of the minutes is often greater than that of some accounting records, although they may be accorded but little study or attention. A valuable work, which indirectly covers much of prime interest to directors, is *Corporate Meetings, Minutes and Resolutions* (New York: Prentice-Hall, Inc., 1929), which is based largely on case material.

work requires a knowledge of law and of business management even more than of finance. Each of these two fields requires special study and experience for a thorough understanding, and the brief recital of this chapter is intended merely to cover a minimum of essentials necessary to our own special field of finance.

Because of the great variety of jurisdictions, each with its own set of laws, this material must be used with great care, since it represents the general run of practice. Similarly, when applying such a general description of the board and the officers' functions, allowance must be made for the wide variations due to differences in types and sizes of businesses. In small units positions are telescoped, and allied or related functions are combined in one office; as size increases, functions are subdivided and carried on through additional officers of similar rank or assistants and subordinates. The very elasticity possible under the corporate form of organization constitutes one of its merits.

CHAPTER 5

CORPORATION STOCK

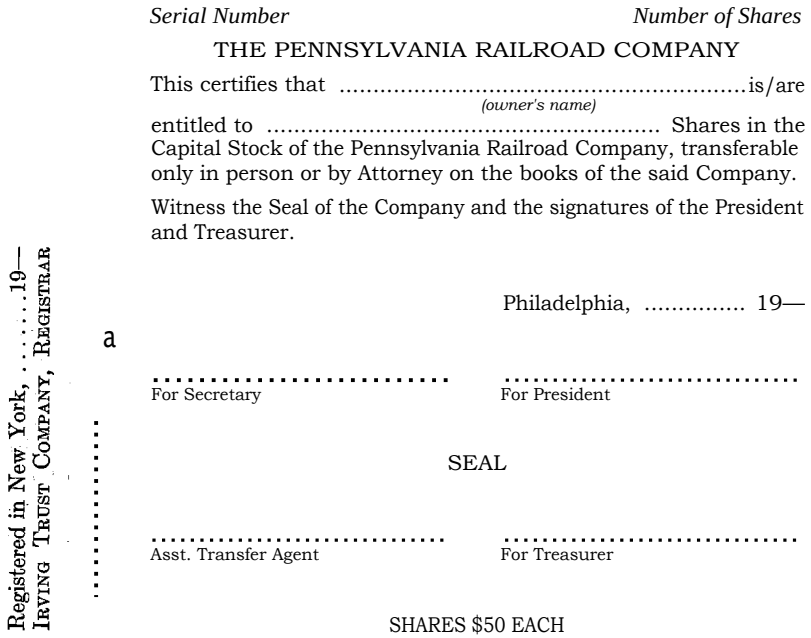
OF THE two kinds of corporation securities, stocks and bonds, only the former are universal and typical. , Bonds, which many corporations do not issue, represent indebtedness. Stock, on the other hand, represents the ownership, great or small, and is found in every business corporation. Because of the large possibilities of gain and of loss, stocks appeal to the more venturesome class of capitalists, just as bonds generally represent relatively unfluctuating stability and safety and attract the conservative. To appreciate the utilization of stock in financing business requirements, a background of terminology is essential. This chapter will provide a working vocabulary, giving the meaning of such terms as *stock certificate, capital stock, capitalization, par value,* and the like, and show in how great a variety of ways the instrument may be drawn in order to meet the exigencies of different situations. Because stocks and bonds may be created in such a variety of forms in respect to the amount and regularity of income, rights to control, and priority in claims to income and assets, finance has come to possess the intricacies of chess, but it has a considerably larger and more fascinated following.

Stock Certificates and Registration

Stock certificates. The stock certificate attracts first interest, since it is the outward and visible sign of stock ownership. This instrument, the legal evidence of ownership, is received upon the purchase and transfer of the stockholder's rights in the corporation. Two of the legal rights of the stockholder are (1) to have such an instrument and (2) to be allowed to transfer it at his pleasure, although statutes may permit the directors to restrict the freedom of transfer in order to safeguard the interests of the corporation and the stockholder.[1]

[1] A provision is occasionally inserted in the stock certificate or stamped on its face providing that such certificates cannot be sold without the owner's first offering them to the corporation or to some other named person. Special circumstances, such as a sale below market price to employees to build goodwill, might explain this unusual restriction. It is not binding in all states. For citations, see C. W. Gerstenberg, *Financial Organization and Management* (New York: Prentice-Hall, Inc., 2nd rev. ed., 1939), p. 125, footnote 8.

The instrument itself, in the case of the large corporation, is made from carefully engraved plates in order to minimize the possibility of counterfeiting. When the stock is listed upon one of the leading exchanges, where it may be more readily bought and sold, the authorities of that exchange may require that the design be submitted to them for approval. The face of the instrument will usually contain only a bare recital of the name of the owner and the number and kind of shares. To obtain any detailed state-


Serial Number *Number of Shares*

THE PENNSYLVANIA RAILROAD COMPANY

This certifies that .....is/are
(owner's name)
entitled to ..... Shares in the Capital Stock of the Pennsylvania Railroad Company, transferable only in person or by Attorney on the books of the said Company.

Witness the Seal of the Company and the signatures of the President and Treasurer.

Philadelphia, ... 19—

....
For Secretary For President

SEAL

....
Asst. Transfer Agent For Treasurer

SHARES $50 EACH

Registered in New York, ...19—
IRVING TRUST COMPANY, REGISTRAR
.....

Figure 3. Face of Pennsylvania Railroad Company Common Stock Certificate.

went of rights it is ordinarily necessary to refer to the charter and bylaws. The signatures of the proper corporate officers are appended. If the company is large enough, the work of transfer may be turned over to a trust company conveniently located for the stockholders. Such a *transfer agent* is not merely a convenience to shareholders, but also, as a result of the greater care and promptness of attention, assures greater accuracy and more certain compliance with the legal requirements. To meet the requirements of some of the stock exchanges, to serve as a check on the transfer agent, and to prevent issuance of stock in excess of charter provisions, a second trust company may serve as the *registrar,* with the function of countersigning the certificate. Upon transfer, a stock certificate is

endorsed by the owner and presented to the transfer agent for cancellation and the issuance of a new certificate in the name of the new owner. This new instrument is then signed by the registrar. Unlike bonds, which are typically issued in round denominations, a stock certificate may represent any number of shares.

On the back of the certificate a blank form of assignment is con-

Know all Men by these Presents, that

....
the undersigned, for value received, have bargained, sold, assigned, and transferred, and by these presents do bargain, sell, assign, and

transfer, unto .....

....

.....

..... Shares of the Capital Stock of The Pennsylvania Railroad Company, and do hereby constitute

and appoint .....

true and lawful Attorney, irrevocable, for ..... and in ..... name and stead, but to the use of the above-named assignee to make and execute all necessary acts of assignment and transfer of the said stock on the books of the said Company, and Attorneys one or more to substitute with like full power for the purposes aforesaid, hereby ratifying and confirming all that said Attorney, or his substitute or substitutes, shall lawfully do by virtue hereof.

In Witness Whereof, ... have hereunto set ..... hand

and seal, this ..... day of ..... one thousand

nine hundred and .....

.....

Signed, Sealed and Delivered
in presence of

.....

Figure 4. Back of Pennsylvania Railroad Company Common Stock Certificate.

ventionally printed, which the stockholder signs when he wishes to transfer his stock wholly or in part. If the transfer is for a portion of the whole, the old certificate is turned in and canceled, and two new certificates are issued, one for the transferee and one for the original owner for the balance of the stock which he did not wish to sell. Transfer agents are likely to require the certification of the stockholder's signature on the assignment form by some bank or brokerage house in order to assure genuineness.

Care is important in 'the handling of certificates because, if one is properly endorsed by the owner and then passes for value into

the hands of a *bona fide* purchaser who is without notice of any defect in the title he is acquiring, that purchaser has a good and legally enforceable title.[2] Like a check, or any negotiable instrument, the certificate becomes transferable to bearer when it is endorsed in blank; limited transferability can be had by endorsing the instrument to a specific person, as a bank or a broker.

This quasi-negotiable character of stock certificates facilitates their ready transfer but increases the danger of loss. When a stock certificate is assigned to a bank or other creditor as collateral security for a loan, the assignment (or "power of attorney" to sell) is customarily a separate instrument, so that it may be readily destroyed when the certificate is returned to its owner without making any erasure upon the latter instrument. Sometimes, as a special precaution when a certificate is being sent through the mails, it is sent without endorsement on the back and a properly signed assignment form is transmitted separately.. When a certificate has been lost or stolen, the corporation will refuse to issue a new one unless a bond is posted to protect the corporation from loss in case the original certificate should appear endorsed in the hands of a *bona fide* purchaser for value.[3]

Rights affected by registration of holders. The prompt transfer on the books of the corporation of the stockholder's interest may be vital for two reasons: first, because it is the corporation's record which determines to whom dividends shall be sent; second, it is this same record which determines who shall have the right to vote at stockholders' meetings. Sometime before a dividend is to be paid by a corporation, ordinarily ten days or two weeks before that date, a list is made up from the corporation's record of the stockholders to whom dividend checks are to be mailed subsequently.[4] Any purchaser of stock after the close of business on this date buys it "ex-dividend"; that is, the right to receive the next dividend remains with the transferor.

This negotiable characteristic is the result of the Uniform Stock Transfer Law. For a copy of this law, see C. W. Gerstenberg, *Materials of Corporation Finance* (New York: Prentice-Hall, Inc., 2nd ed., 1915), pp. 111-112.

The bond required for reissuance is conventionally twice the market value of the stock in question, although more may be demanded if deemed necessary. Some agitation exists for an unlimited indemnity bond, which is particularly desirable because of the possibility of unusual appreciation in the value of common stocks. In the event that the old certificate did reappear in hands capable of enforcing title, the bond would be seized to the extent necessary to purchase such shares or their equivalent in the open market in order to retire them. This procedure is necessary to prevent duplication in outstanding certificates with the resultant overissue by the corporation.

'In other countries, stock may be bearer stock, in which case dividends may be paid by coupon and the certificate is transferable by delivery. (Registered and coupon bonds are described in the next chapter). For example, Imperial Oil, Ltd., and its affiliate, International Petroleum Co., Ltd.—Canadian corporations—use bearer stock.

Because voting power is important as the means of control, a stockholder concerned over that right will see that any stock which he purchases is transferred to his own name before the date upon which the list is compiled determining who shall vote at the annual or other stockholders' meeting.[1] The New York statute is one of the strictest in binding the inspectors of stockholders' elections to the observance of this formal list of registered stockholders. Nevertheless it allows the court to review the election of directors, go back of the transfer book, and set the election aside where the statute has given a pledgor of stock the right to vote but the secured pledgee has the stock transferred to his own name and votes it. Under the same New York statute, a person who has sold a certificate of stock after the date for compiling the list of registered stockholders but before a meeting must on demand give a proxy to the real owner.[1]

Proxies. A proxy is an authorization of a registered stockholder to another person to act in his place at the meeting, and is a statutory right. The term *proxy* is also applied to the person so authorized to act as a substitute. The average stockholder becomes familiar with this device through the proxy form mailed out annually to him by persons representing the dominant element in the corporation. Except when some controversy is raging, the stockholder will usually return the requested proxy or ignore it. While the proxy makes the delegation of voting power easy, the law of proxies has tended to keep that instrument responsive to the wishes of the stockholder and not an instrument to bind his will or transfer his power indefinitely to another. The ordinary proxy is always revocable. Some jurisdictions even make proxies void after a limited period.[2]

Related Concepts

Corporate stock. The capital stock of the corporation is sometimes defined as the aggregate ownership interest of the corporation. This interest is divided into shares or units. The stock certificate is the instrument which evidences the number of shares

[1] Some corporations close their transfer books for a period while compiling lists for either voting or dividend payments. Such a practice is not only unnecessary but is regarded as undesirable because it interferes with ready transfer.

[2] For a condensed statement as to who shall have the right to vote at it stockholders' meeting, see W. W. Cook, *Principles of Corporation Law* (Ann Arbor: Lawyers' Club, University of Michigan, 1925), pp. 337-344.

Ibid., pp. 335-337. Irrevocable proxies may be created, however, if they are based on consideration or coupled with an interest in the stock, as when a seller of stock executes a proxy in connection with the sale.

For regulations governing the form and content of proxies as required by the Securities and Exchange Commission, see pp. 729-730.

UNITED AIR LINES TRANSPORT CORPORATION

Notice of Annual Meeting of Stockholders, April 12, 1938

NOTICE IS HEREBY GIVEN that the Annual Meeting of Stockholders of UNITED Ain LINES TRANSPORT CORPORATION, a Delaware corporation, will be held at the office of the Corporation, 221 No. LaSalle Street, Chicago, Illinois, on Tuesday, April 12, 1938, at eleven o'clock in the forenoon, for the purpose of:

(a) Electing directors, and

(b) Transacting such other business as may come before the meeting.

RECORD DATE: The close of business on March 23, 1938, has been fixed as a record date for the determination of stockholders entitled to notice of and to vote at said Annual Meeting.

ANNUAL REPORT: A copy of the Corporation's annual report for the year ended December 31, 1937, is enclosed herewith. Additional copies of the notice, proxy, and annual report may be obtained from City Bank Farmers Trust Company, 22 William Street, New York, New York.

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PROXY

UNITED AIR LINES TRANSPORT CORPORATION — Annual Meeting of Stockholders — April 12, 1938 -

KNOW ALL MEN BY THESE PRESENTS, that the undersigned stockholder of UNITED AIR LINES TRANSPORT CORPORATION hereby constitutes and appoints W. A. PATTERSON, WILLIAM A. M. BURDEN and PAUL M. GODEHN, and each of them, the true and lawful attorneys, agents and proxies of the undersigned, with full power of substitution and revocation to each of them, for and in the name of the undersigned to vote all the shares of the said Corporation which the undersigned may be entitled to vote at the annual meeting of the stockholders thereof to be held on April 12, 1938, or at any adjournment of the said meeting, with all powers which the undersigned would possess if personally present, upon the election of directors, as set forth in the notice of said meeting dated March 10, 1938, a copy of which notice has been received and read by the undersigned, and to transact any and all such other business and to vote upon any and all such other matters as may properly come before the said meeting or any adjournment thereof.

The undersigned hereby ratifies and confirms all that the said attorneys, agents and proxies, or their substitute or substitutes, or a majority of such of them as shall be present and act at the said meeting, may do in or about the premises by virtue hereof.

IN WITNESS WHEREOF, the undersigned has executed this instrument under seal, this ..... day of ..... , 1938.

T

..... (L. S.)

Signature to the foregoing proxy should correspond with the name appearing hereon. NO WITNESS IS REQUIRED.

NOTE: The foregoing proxy is being solicited by and in behalf of the management of UNITED AIR LINES TRANSPORT CORPORATION.

PROXY. In order to assure the presence of the necessary quorum at the Annual Meeting, please detach, sign, and mail the attached proxy promptly. No postage is required if mailed within the United States. The signing of a proxy will not prevent your attending and voting in person should you so desire. This proxy has been prepared and is solicited, and the proxies therein named, the president and two directors of the corporation, have been designated, by the management, and the proxy will be voted for the re-election of the present directors.

By order of the Board of Directors,

P. M. WILLcox, *Secretary*

Chicago, Illinois, March 10, 1938.

(See Other Side)

Figure 5. Illustration of notice of annual stockholders' meeting and .a proxy.

owned by a given stockholder. The title to all property, or assets, of the business rests in the corporation and not in the stockholders. The latter merely have a share in the "corporate stock," or the excess of corporate assets over debt, and such dividends as that property can produce.

Capital. The term *capital* is sometimes used in such a way as to conform to our definition of "stock," as just given. Unfortunately, the word has been so loosely used even in technical discussions that its usefulness is virtually destroyed. In order that

STANDARD OIL COMPANY (NEW JERSEY)
Consolidated Balance Sheet
December 31, 1938

(Rearranged and condensed for purposes of simplification)

Assets		*Liabilities dc Capital*	
	(in thousands of dollars)		
Cash	$ 173,018	Accounts & Notes Payable.	$ 117,634
Marketable Securities	75,951	Accrued Liabilities	60,028
Accounts & Notes Receivable	135,670	Total Current Debt	$ 177,662
Inventories at Cost or Less	282,707	Bonded Debt	192,851
		Miscellaneous Liabilities	203,058
Total Current Assets	$ 667,346	Total Liabilities	$ 573,571
Land, Plants, Equipment, etc. $2,510,906		Capital (or Net Worth):	
Less Depreciation & Depletion 1,364,844	1,146,062	Common Stock $665,452	
		Surplus 562,863	
		Minority Stockholders' Interest	242,749
Stocks Owned	123,202		
Miscellaneous Assets	108,025	Total Capital	1,471,064
Total Assets	$2,044,635	Total Liabilities & Capital.	$2,044,635

the literature useful for our subject may be critically read and appraised, it is desirable to indicate the several meanings of the word *capital* that have attained a fairly consistent meaning in different fields.

1. *Accounting usage.* In accounting literature there is a practical accord in using the term to mean the net ownership (or stockholders') interest as revealed by the balance sheet. In the accompanying balance sheet of the Standard Oil Company of New Jersey, the total property, or assets, are shown on the left-hand side, at a total value of $2,044,635,000. Opposite these are found items totaling $573,571,000, which represent the indebtedness. The ex-

cess of the assets over the indebtedness, amounting to $1,471-064,000, is the net worth or total book value of the stockholders' interest. Most accountants use the word *capital* to mean this net worth.

Before passing to the other definitions, it may be noted that the, *book value* of the corporation's stock is obtained from the haraneegheet figure of net Worth—Ahat is, the sum of the capital stock and sufpliisas they appem on the books.[8] The per-share figure may be obtained by dividing by the number of shares outstanding in the hands of the public. The corporation may have a larger number of shares authorized by its charter than have been issued, in which case the amount of authorized but unissued stock may be indicated, but no money amount is placed among the items on the liability side of the balance sheet. Stock which has been issued but subsequently reacquired and canceled should be omitted. Sometimes, however, stock is reacquired and held alive. Such stock is known as *treasury stock* and is shown in the balance-sheet. It should be eliminated from the assets, and a deduction should be made from the net worth so that it will be excluded from the computation of the book value of stock, which should cover only outstanding shares.

2. Business usage. Usage of the term *capital* in business circles varies. Occasionally a careful speaker employs the term in the accounting vernacular just cited. More frequently, a businessman speaking of the capital needed to operate a business means the total sum of assets of one sort or another which must be brought together. Under this interpretation the total assets, which in the above balance sheet were $2,044,635,000, would be meant.[9]

3. Economic usage. Economists, too, differ in their definition of capital, although their general definition is "wealth used in the production of further wealth."[10] Under this definition, claims of

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When preferred stock exists, the computation of book value for the common may be further complicated. The simplest general rule is to deduct from the total net worth the sum for which the preferred would have a prior claim in involuntary liquidation. Ordinarily, this sum will equal par, or its equivalent, plus accumulated unpaid dividends. See H. G. Guthmann, *Analysis of Financial Statements* (New York: Prentice-Hall, Inc., rev. ed., 1935), pp. 35, 128.

[9] Actually an item of Patents, Goodwill, and so forth, representing less than 3 per cent of the assets, is included under Miscellaneous Assets, whereas it should have been eliminated. The rearrangement was planned to simplify the illustration. Similarly, the meaning of "Minority Interest," a phase of holding company accounting, is ignored at this point.

[10] Taussig writes ". . . the concrete things or capital goods which constitute the material equipment of the community, . . . real things, not rights to things; . . . producers' capital—those goods which make up the apparatus of production." F. W. Taussig, *Principles of Economics* (New York: The Macmillan Co., 4th ed., 1939), Vol. II, p. 6.

Deibler defines capital as "• , that part of wealth, other than land and

one person upon another are ignored, thereby excluding, such items as accounts receivable (that is, the claim of the merchant against his customers), bank balances (that is the claim of the businessman against his bank), and securities (that is, claims against some other corporation). The idea underlying this concept is that all of these claims, however useful they may be in facilitating the work of the community, are not things in themselves which can satisfy human wants. So in the accompanying balance sheet the only economic goods are the inventories, or merchandise on hand, and the plant and equipment, or the tangible buildings and machinery. As for the item of land, which is ordinarily included under the latter asset heading, economists would disagree as to its right to be called *capital.* Since the fundamental idea of the economist is to eliminate mere personal claims from the picture and include only those items which in themselves serve human needs—making up a social balance sheet, as it were, by the elimination of interpersonal claims—his concept might well be termed *social capital, economic capital,* or *producers' goods.*

4. *Legal usage.* At law the word *capital* has been in the past a contraction of the words *capital stock,* in the narrow sense of par *value,* the amount which is ordinarily (but not always) paid in for stock. It is the par amount which appears in the balance sheet opposite the title "eapirtaFROOk." In the case of stockwithout par value (discussed later in this chapter) some arbitrary amount, termed the "stated" or "declared" value, takes the place of the par amount in the balance sheet. Often the amount paid in for such stock is more than the stated value, and it is necessary to read the laws of a given state to determine whether or not the term *capital* covers only the stated value or the stated value plus the paid-in surplus." Since a corporation may receive a surplus contribution from the stockholder over and above the par or stated value or may accumulate a surplus out of profits, this value may

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personal services, that is used as an aid in further production." F. S. Deibler, *Principles of Economics* (New York: McGraw-Hill Book Company, 2nd ed., 1936), p. 90.

Many definitions given can be understood only from the context, as Alfred Marshall's statement that capital from the social point of view is "all things other than land, which yield income that is generally reckoned as such in common discourse . . . ," and Irving Fisher's definition as "a stock of wealth existing at an instant of time." Alfred Marshall, *Principles of Economics* (London: Macmillan and Co., Ltd., 8th ed., 1920), p. 78. Irving Fisher, *The Nature of Capital and Income* (New York: The Macmillan Co., 1906), p. 52. For a rather complete reference on economic terminology, see L. M. Fraser, *Economic Thought and Language* (London: A. & C. Black, Ltd., 1937).

' Thus, in the revised (1937) Illinois corporation law, *stated capital* is defined in the case of shares with par value as the par amount, and in the case of shares without par as the consideration received by the corporation with such additions and subtractions as are formally made in accordance with the law (Sec. 2k).

be only a part, and sometimes a very small part, of the total ownership interest, or net worth. In the balance sheet already cited, the relative importance of surplus to the common stock (or Capital Stock account) is illustrated.

For the sake of clarity the more exact terms (1) *net worth,* (2) *assets,* (3) *producers' goods,* and (4) *capital stock outstanding,* or par *or stated value of stock outstanding,* appear preferable for these four usages, respectively, because of their more exact meaning, and they do not leave -the reader to interpret from the context, as is necessary when the word *capital* alone is employed. In these pages we shall hereafter adopt the more precise terms and avoid the ambiguous term *capital.*

Capitalization. The capitalization of a -corporation is the sum of the par value of the stocks and bonds outstanding. [12] When no-par stock is used, the stated-value figure is generally without much business significance, and it is better to describe the capitalization as so much bonds and so many *shares* of stock rather than to use what is likely to be a very misleading dollar amount for the stock outstanding. If a corporation were in a promotional stage and its financing had not been completed, the term *capitalization* might refer to the total securities which it was permitted to issue under its charter. The phrase *"authorized* capitalization" would be clearer and more proper in such a case, although perhaps its use would deprive the promoters of a grandiose phrase.

The accountant uses the word *capitalization* in a second and different sense. When an expenditure is made and the amount spent results in an asset being set up in the books instead of a charge being entered in an expense account, the expenditure is said to have been capitalized. Thus the term *capitalization* comes to apply to the process of setting up property on the books of account. If one thinks of capital in the business sense as assets, it is not difficult to understand this usage. Since the accountant's balance sheet always has two sides that must be in balance, it is clear that conservatism in setting up assets will have a bearing on the capitalization on the liability side representing the outstanding securities. Securities cannot exceed the assets except when a deficit has arisen. Thus, if a new mining corporation decides to capitalize its mining claims at $500,000, this will provide the basis for the issuance of $500,000 worth of stock to acquire those claims. The capitalization could be more or less generous if directors decided to "capitalize" their assets at a greater or smaller amount. Hence the amount of capitalization (in the first and generally used finan-

[12] In the law of some jurisdictions capitalization is defined as the amount of authorized capital stock and does not include debt.

cial sense of *securities outstanding)* will be great or small depending upon how extravagant or conservative the directors are in their "capitalization of the assets" (in the second sense) which they are purchasing for the newly formed corporation by the issuance of stock.

"Capitalization of income," a phrase used in the mathematics of finance, offers still a third use of the term *capitalization.* In this sense it is the process of estimating the present investment value of a property by discounting to present worth the anticipated stream of future income. Thus, if a certain business were expected to yield an income of $50,000 per year perpetually, and 10 per cent were judged a fair rate of return upon an investment of that sort, then the value of the business would be $500,000, the result being obtained by the capitalization of income. If the stream of income were irregular from year to year, the mathematics would be more involved, but the essential process of discounting would be unchanged.

The most troublesome part of the foregoing process in practical finance is estimating the most probable amount of the future net income to be realized by a business, and this factor makes the valuation of mining properties, patent rights, and business property generally a most debatable matter. This factor of doubt explains why so much disagreement may exist over the proper value of assets to be acquired by a new corporation and why capitalization, in the sense of outstanding securities, may be so readily varied. This third use of the term *capitalization* is clearly related to the preceding two. The proper capitalization figure for the assets may, and some believe should, be based on the capitalization of income, and the decision as to the value of the assets will, in turn, determine the amount of securities which may properly be issued. This capitalization-of-income concept of value will be discussed further in the sections devoted to promotion, merger, and reorganization.

Capital structure. Since the term *capitalization* includes only the amount of the outstanding securities, the phrase *capital structure* may be used to cover the total combined investment of the bondholders and stockholders, thereby including the surplus in whatever form it appears. Whether the stockholders' net worth has been built up by paid-in surplus or by surplus profits left in the business, it represents an investment which should produce increased earning power and additional assets to protect the creditors. In fact, with the increased use of stock without par value, the capital stock figure in the balance sheet is frequently a small or nominal figure, giving little clue to the investment of the stockholders. In such cases, the capitalization figure is without meaning, and the

capital structure figures are essential to gain an idea of the total long-term investment in the business and the respective proportions of bonded debt and stockholders' interest.

The balance sheet of the Standard Oil Company of New Jersey used previously as an illustration will show the reader of what large importance the surplus can be as compared with the capital stock. The item "Minority Stockholders' Interest," also given under "Net Worth," represents capital stock and its prorata share in surplus of subsidiary corporations which is not owned by Standard Oil but is still in the hands of the public. The figure would be included in the consolidated capital structure, since it is a part of the stockholders' contribution to the system; it would be omitted, however, in stating the figure for the Standard Oil Company as an individual corporation—that is, a holding company instead of a consolidated system."

Par Value

Meaning of par value. The par value of a share of stock is the sum stated in the charter as the nominal value, for which a minimum figure is set by the law in some states. The stock must not be issued for less than this sum, or else the stockholders will find themselves personally liable to creditors for any unpaid balance in the event of insolvency." (When the par value has been paid in to the corporation, it is customary to print on the stock certificate "Fully paid and nonassessable," so that freedom from further liability may be known.) Furthermore, the directors are not permitted to pay any dividends that will reduce the excess of assets over debts to an amount less than this par value. If such a dividend declaration were made, or a similar result were brought about by business losses, then the "capital" (legal usage) would be said to be impaired. Because the law makes par value the measure of a compulsory initial minimum capital and requires that it shall not be impaired by voluntary action, the so-called trust fund doctrine has grown up. Though not a genuine trust fund, the par value, under this legal theory, constitutes a fund to be safeguarded for the creditors of the corporation, and it must not be dissipated or reduced by any voluntary act of the directors. In practical finance, par value has

[13] The difference between the holding company capital structure and the consolidated system figures may be had from the reports of the American Telephone and Telegraph Company. For a discussion see Guthrnann, *op. 'cit.,* Chapter XVIII.

[14] As evidence of this risk, a financial commentator points out that, even though it is extremely unlikely that any call will be made upon shareholders, there is a higher yield on the market price of certain English bank shares which are only partly paid, as compared with fully paid shares of the same banks, as in the case of Martin's and the National Provincial. *Financial Digest* (London), June 18, 1934, p. 4.

but modest significance in the case of stocks, save as these two legal requirements must be complied with in a formal fashion.

Why par value lacks significance. The reasons why par value lacks significance are particulary important in view of the considerable popular confusion on the subject and may be summarized as follows:

1. *The valuation of assets is often arbitrary.* Frequently shares of stock are issued for property instead of cash. As pointed out in the discussion of the term *capitalization,* valuation is a difficult task at best. When the enthusiasm of promoters is considered, it is not difficult to understand why property valuations often appear fantastic to outsiders. Even though property is overvalued, so that there is a failure to pay in par value for the stock at the time of its original issuance, courts generally hold the stockholders free from liability unless the property is of so trifling a character that it has practically no value. If the property should be practically worthless or unsubstantial in its nature, the courts will hold that there has been no payment at all and the stockholders are liable. Even this remedy is not available to corporate creditors who knew of the mode of issue at the time they extended credit, nor can creditors hold later stockholders who made their stock purchase without knowledge of the improper issuance but believed it fully paid and nonassessable.

The Securities and Exchange Commission, in passing on securities that come within its jurisdiction, requires a disclosure of relevant information that makes exaggerated valuations difficult. Thus, if those associated with a new corporation acquired property at a figure much less than that shown later on the ledger of the corporation, the fact would undoubtedly be deemed "material" and would have to go into the registration statement. Or, where the value was the result of appraisal, the basis of the estimate would have to be disclosed.

2. *Par value may represent only a part of the stockholders' total* payment. While unusual for most corporations, banks and some other financial concerns often sell their stock for more than par. Such paid-in surplus may be employed to care for losses should there be any during the difficult period when the institution is starting business. Without such a protecting surplus, any early operating losses would impair the (legal) capital, and under the strict banking law might require an embarrassing assessment at a time when such a blow to prestige might be fatal. Par value for such a corporation is but a nominal figure and gives no clue even to the original investment of the stockholders. In recent years, since no-par stock has become common, the former emphasis upon par value has greatly diminished. That par value has lost its power to impress, at least outside the low-quality field of promotional stocks,

is indicated by the adoption of a very low nominal par by some corporations.[15] Such a low figure for Capital Stock means that the balance sheet will show a very large Paid-in or Capital Surplus. The change from no par to a low par value may result in lower franchise and transfer taxes.

3. Undistributed earnings may add to or losses may reduce the original value of the stock. If par value had represented the exact original investment of the stockholders, it would ordinarily cease to be a measure of current investment very soon because of earnings left in the business to add to the original investment. Not infrequently a dividend of 10 per cent upon par value, measured as dividends conventionally are, is referred to as an indication of business success. Yet an examination of the balance sheet may reveal that the stockholders originally contributed considerably more than the required par value and have subsequently deprived themselves of dividends in order to increase further that original contribution. The dividend of 10 per cent of par value turns out to be some very low rate when compared with the actual, rather than the nominal, investment.

4. The fair market value of the business as an investment must always be the most important test of value rather than the nominal par figure. Many businesses with par value fully contributed in cash at the outset develop so little earning power that the subsequent market value never reaches the original par. On the other hand, when the business is able to earn from 20 to 30 per cent upon par, it is apparent that the market value will almost certainly exceed the par value even if that par value exactly represents the amount of actual cash investment in tangible property. Remembering then that investment value is based on anticipated future income, it is easy to understand why mining claims or patent rights may have a real market value far in excess of any cash or labor which may have been expended to obtain them.

The treasury stock device. Because there has been so much emphasis placed upon the importance of par value, its nominal character may be further emphasized by a description of the so-called treasury stock device, whereby promoters have found it possible to create stock with par value fully paid in as far as the law is concerned and which may be distributed later either at a nominal

[15] Examples of corporations adopting a nominal $1 par value are American Hide and Leather Co. (1935), American Home Products Co. (1935), Hat Corporation of America (1932), Island Creek Coal Co., Lehman Corp. (1937), McCrory Stores Corp. (1936), Reynolds Spring Co. (1934), Studebaker Corp. (1935), and Wayne Pump Co. (1934). A number of these formerly had stock without par value. Indicative of the nominal character of par value, American Home Products stock sold from $26.12 to $36.37 per share in 1934 and paid a dividend of $2.40; Island Creek Coal's preferred is also $1 par but is entitled to $6 cumulative dividends and $120 per share in liquidation.

price or as an outright bonus to be given with bonds. Take an illustrative case. An inventor has perfected a patented device but lacks the cash necessary to put it on the market successfully. A study of the problem leads him to believe that $100,000 would be adequate for this purpose, and he would be willing to pay 6 per cent on such .a sum, give it a prior claim, and offer, a half interest in any profits beyond that. To accomplish .this a corporation is formed, and $200,000 par value of common stock is issued to the inventor for his patent rights. The stock, has now been issued for property and is fully paid, but the corporation is as yet without any of the necessary cash. So the inventor-stockholder donates back one half of his holdings to the corporation without cost to it in order to facilitate the desired financing. The corporation now offers $100,000 worth of 6 per cent bonds, or 6 per cent preferred stock, at par, or $100, and a bonus of an equal amount of common Since this bonus common stock was originally issued for property at its full par value, the legal formalities have been complied with, and neither the original holder, the inventor, nor the later holders (the investors) can be held liable for the benefit of creditors. The fact that a person to whom the stock is issued returns a part of it as a gift to the corporation to sell below par and put the proceeds in the corporate treasury for working capital does not necessarily prove fraud in the, valuation put upon the property in the eyes of our courts. Such fully paid stock returned to the treasury of the corporation is properly called *treasury stock,* a term which should not be applied to ordinary authorized but unissued stock.

The same relationships might as readily have been established had the common shares been given a half, a tenth, or even no par value. If, for example, the patent rights had been valued at $1,000 instead of $100,000, and common stock for that amount had been issued to the inventor, with one half later returned to the treasury, the resulting $500 total par value would have been exactly as valuable as the $50,000 before. In either case, whatever the par or nominal value, one half of the common would represent ,a claim to one half of any profits over and above the 6 per cent paid on the securities with a prior claim. The only reason for issuing a large rather than a small par amount lies in the effect of this nominal figure upon the imagination of the investor to whom it is offered as a bonus or at some amount under par. This illustration emphasizes the need to ignore par value and to study rather the assets and earning power and the fractional interest which one's shares are of the total claim to those assets and earning power.

Stock without par value. In order to eliminate the frequently misleading par-value sign upon the stock certificate, influential persons have for many years favored the establishment of stock without

par value. In 1912 the state of New York passed the first law permitting no-par stock. The movement has spread until today only three states—Nebraska, Oklahoma, and North Dakota—have failed to legalize its issue. By 1922 some 6,763 companies, or nearly 2 per cent of all corporations, had issued no-par shares, and by 1925 the number had almost tripled, totaling 17,543. Figures based on stocks listed on the New York Stock Exchange, which represent the largest and most widely distributed issues, show an even greater popularity of no-par stock than is found among the general run of corporations. Industrial and holding companies most frequently employ the device, while among railroad and public service corporations its use is rare. Leaving out railroad stock issues from the total number listed on the New York Stock Exchange as of January 1, 1928, nearly 43 per cent were of the no-par variety in terms of market value.[16] The rapid progress of this new type of stock in American finance makes it essential that it be clearly understood by both the student of business finance and the student of investment.

The chief practical differences between stock with and without par value are these: first, the absence from the- no-par issue of the nominal price tag, or par value, emphasizes the essential quality of stock as a fractional interest or share in profits and assets and not as a fixed sum of money such as characterizes the- bond or credit instrument; second, the absence of par permits the sale of stock as fully paid from time to time at such varying prices as the promoters may care to designate' in their charter (subject to such limitations as they may care to establish), save in those states which set a very small minimum requirement; and, third, without par value there is the possible danger that the dividing line between "capital," which must be kept intact, and surplus, which may be distributed as dividends, is left indistinct.

The first of these differences has been given more emphasis in discussions and debates than perhaps its 'practical importance warrants. The educational value of the no-par device 'is difficult to determine. Without par value the amateur investor or speculator is not misled into drawing an analogy between stocks and bonds. A

"These figures are the compilation of the National Industrial Conference Board of New York City, as reported in the *New York Times,* August 12, 1928. In 1925 Delaware reported a particularly large proportion of no-par stock issues; Rhode Island, Massachusetts, Maryland, Ohio, New York, and the District of Columbia reported considerably more than the average.

Dewing reports that new common stock issues of large utility and industrial corporations (with assets of $10,000,000 or more) show a decided trend toward the use of no par value. The percentage of no-par stocks to the total increased from 19.2 per cent in the, period 1915-1917 to 85.4 per cent in the period 1930-1932. A. S. Dewing, *Corporation Securities* (New York; Ronald Press Co., 1934), p. 66.

price below par ceases to suggest a bargain, a discounting from some "intrinsic" or "basic" value, and a price above par can no longer be taken to mean that the stock has risen excessively or become inflated.[17] Among those familiar with financial matters par value has no appreciable influence in determining the price they are willing to pay for stock. Prices on any of the security exchanges are a ready proof of this.[18] In the case of unskillful buyers, par value probably has a deceptive influence. Otherwise the treasury stock device would be meaningless. Why should promoters bother to put a $100 price sign on the stock certificate which is to be sold for some lesser sum, such as $50 or $25? They need merely to issue a certificate with a par value for the smaller amount, and the same results will have been attained—namely, absence of stockholders' liability for stock• not fully paid for, acquisition by the corporation of the desired amount of cash, and the sharing of rights to property and profits in the previously arranged proportions. The corporation would have exactly the same amount of cash and property to produce profits under either plan, and would suffer only from a lack of the more imposing figures of the greater par value and of assets in its balance sheet. A more humble par-value figure would even be rewarded by lessened incorporation and annual franchise taxes by the state.

Even if the promoters desire to give common stock as a bonus with other securities, the result might be substantially achieved by its issuance with a small par value, such as $1, instead of resorting to the treasury stock device. Clearly the retention of par value can be an aid only to promoters desirous of impressing relatively unskillful buyers with the bargain represented by the difference between the

"Even in the case of bonds overemphasis is placed on the par value, which is the amount paid the bondholder when his instrument becomes due. Some discrimination seems to exist against bonds which sell above par, so that an investor can sometimes increase the rate of return upon his investment if he will choose bonds selling at a premium (that is, above par) instead of the more popular discount bonds (that is, bonds selling below par). See pp. 325-326.

"Dewing agrees with this conclusion with regard to stock values in a free and competitive market. A. S. Dewing, *Financial Policy of Corporations* (New York: Ronald Press Co., rd. rev. ed., 1934), pp. 30-31. His conclusion is based upon data by N. C. Tisdel in an unpublished thesis entitled "No Par Value Stocks," but would appear to be inadequately supported by the excerpts he quotes. His argument is that, if the absence of par depresses price, then no-par stocks on the average should rise more slowly and fall faster than par stocks, and that the two kinds should not fluctuate in market price at the same times. However, if the no-par characteristic were a depressing influence, it should result instead in a *constant* differential, such that the no-par stocks would sell regularly at relatively lower prices than par stocks with similar assets, earning power, capital structure, management, and so forth. The data presented merely showed par and no-par stocks corresponding in their up and down market movements.

modest consideration asked and the large par value on the handsomely engraved certificate.[19]

The morality of no-par stock, which does away with the deceptively simple measure of value found by some in par, should be evident, but too much should not be expected. No mere change in the technical procedure of issuance will protect those who are innocent of a knowledge of finance. For such the so-called blue-sky laws, and the Federal security laws administered by the Securities and Exchange Commission, are at least the first step in the right direction. These laws—the former passed by a number of the states—require that security issues be passed upon by a commission, and, although they do not in any way guarantee quality, are designed to eliminate purely fraudulent issues and excessive profits and selling charges by stock-jobbing promoters of the more vicious type, and to insure adequate information.

Problems of no-par stock. Some of the important problems in connection with no-par stock are discussed below.

1. ***Freedom in price of issue.*** The ability to sell no-par stock at any price is an advantage to the corporation in financing in the years after the original issue. If par-value stock has been used and conditions result in the market value falling below par, financing by

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[19] An important reason for an excessive property valuation and a larger amount of par stock has often been the desire to give the appearance of a large property value supporting bond or preferred issues. (This point may best be appreciated after reading Chapters 11-13.) In this respect a no-par issue is by far the more honest procedure. That stock with only a nominal book value can be sold for substantial sums on the basis of its earnings was shown by the bankers who sold the huge Dodge Brothers issues in 1925.

INITIAL CAPITALIZATION AND SURPLUS, APRIL 1, 1925.	
Convertible gold deb. 6's	$75,000,000
Preference stock	850,000
Common stock A	150,000
Common stock B	50,000
Capital surplus	4,608,682
Total	$80,658,682

Strangely enough, W. Z. Ripley cites this case to prove the evils of no-par stock. He stresses the paradoxical character of a no-par preferred listed at $1 per share in the balance sheet yet promising a $7 cumulative dividend. He neglects to mention that the earnings for 1924 were nearly $20,000,000, or enough after paying the bond interest to cover a $7 dividend on 850,000 shares of preference stock more than twice over. By the end of 1925 a substantial fraction of the bonds was eliminated by conversion into securities junior to the preferred, making the situation even more favorable. The absence of par value, of goodwill, and of fictitious property valuations from the balance sheet made emphatic to the prospective purchaser his dependence upon the continuance of previous highly favorable earnings. See W. Z. Ripley, *Main Street and Wall Street* (Boston: Little, Brown and Co., 1927), pp. 195-196. To those unfamiliar with the work cited it should be said that this sparkling contribution probably did more than any other single book to fasten attention upon the dangers of many financial practices conventionally accepted prior to the SEC.

a stock issue is prevented. Buyers will not offer more than the market price for stock, and to offer it at less than par would entail stockholders' liability, even if such issues were not forbidden.[20] In recent years some corporations have even amended their charters, changing from par to no par or greatly reducing par value in order to avoid this obstacle in a situation which demanded financing through the sale of common stock.

In this connection the double disadvantage of the treasury stock device may be noted: (1) When a share is labeled with a par value of $100 and sold for $50, the company is obliged to earn an exceptional return upon this modest cash investment in order to show a reasonable return upon the par amount. (2) Furthermore, if the company does fail to earn a reasonable amount upon par, the market value will probably fail to reach par and so prevent financing through the sale of later issues of common stock.

This freedom to issue no-par stock at any price creates a possible danger for the original stockholders. If the management subsequently offers stock at reduced prices when times are bad, other stockholders are thereby permitted to purchase a share in the business at a price disadvantageously low to the original stockholders. Thus the management might create a new issue, doubling the number of shares outstanding, in order to obtain a relatively small amount of money. The old stockholders' shares now have but a half interest in profits, whereas, if the same money had been obtained by a sale of stock at a more advantageous time, it might have been obtained by the offer of fewer shares and so perhaps giving but a third, a fourth, or a fifth interest for the needed money. Had the original stock had par value, a subsequent sale at a lower and so possibly disadvantageous price could not have occurred without first amending the charter with the consent of the stockholders to lower or abolish the former par value.

Two answers are usually given to this objection. The first is that the original stockholders generally have a first right to subscribe to subsequent issues and so could purchase their proportional share of the new issue if the price were a bargain. As a practical matter, stockholders do not always have the necessary funds at the same time that their corporation needs money, and furthermore another investment in the same company might be unsuitable in the light of

[20] Where a value is assigned to no-par stock in the corporate charter, that figure becomes the legal equivalent of par value in the matter of stockholders' liability. To avoid personal liability the stockholder must pay in not less than this stated value nor less than the amount stipulated in the subscription agreement. Ordinarily the charter does not state a value, and the directors are free to stipulate the sale price, so that the stock becomes fully paid and nonassessable upon the fulfillment of the second condition. For further discussion, see E. F. Donaldson, *Business Organization and Procedure* (New York: McGraw-Hill Book Co., 1938), pp. 251-254.

the investment requirements of particular stockholders. The second answer is that, if stock market conditions are such that the stock of a given corporation can only be sold at less than the original par, the "true value" of a share in the business has declined and a sale at the borrowed price merely represents the realities of the investment market. This assumes that the "bloodless verdict of the market place" is always right. Market prices fluctuate greatly from time to time, however, and represent appraisals of fleeting significance. If management sells stock with no attempt at timing, the old stockholders may dispose of shares in their business on a most unfavorable basis.

A second objection to this freedom in price of issue is that it facilitates fraud against stockholders by promoters. Three promoters purchased a license to do business under a certain name, transferred it to a company for 15,000 no-par shares, and then disposed of their shares to the public for $100,000. The selling cost was $51,305.02, the balance being divided among the promoters. At the time of sale the company had no other assets than the license listed at $1,000. Suit was brought by the stockholders to hold the promoters liable to the corporation for insufficient payment upon the stock issued. The court held that there was a full *bona fide* consideration for the sale by the company to the chief promoter and his associates of the 15,000 shares of no-par capital stock, but added that, had this stock had par value, and had the stock par or face value exceeded the value of the property given to the corporation in exchange for the stock, then "a different question would arise." [21] Some doubt might be expressed as to how far a court would actually have held these promoters even if the stock had had par value, in view of the unknown possibilities of profit residing in the license. It is true .that the removal of par virtually eliminates any possible recovery from promoters for unpaid subscription. The general rule is that the directors can decide the price to be paid for no-par stock, subject to any legal minimum set by the state or the corporation charter, and the stock is fully paid and nonassessable when the subscription price has been paid in. But courts have for the most part also been unwilling to examine the consideration paid in for par stock except in extreme cases, so that the usefulness of the par-value feature would seem very doubtful. In cases such as the one just cited, the fault is usually found to lie in the inadequate investigation made by the purchaser of the stock. It should not have been difficult to learn that the stock was that of a corporation whose most substantial asset was a license to use a name.

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[21] Piggly Wiggly of Delaware vs. Bartlett (N.J. ch. 1925), 129 Atl. 413. See reference to this case by Carl B. Robbins, *No Par Stock* (New York: Ronald Press Co., 1927), pp. 86-87.

2. *Freedom in dividend disbursements.* Probably the most serious objection to no-par stock is that it renders hazy the dividing line between "capital," which should be kept intact, and surplus, which may be distributed as dividends. When no-par stock is issued, the directors may treat any portion of the receipts from the purchasers of the stock as surplus, save as the law of the state of incorporation may require that some nominal portion be treated as "capital." Arguments are sometimes offered that directors are obliged to regard the fund received for stock as inviolate, even though their accounting records label a portion of it "surplus." Berle states .

> Investors purchasing stock at original issue universally understand, where nothing appears to the contrary, that they are contributing to a safeguarded capital fund. This is their intent; not presumed, but actual; it is the common understanding of promoters, investors, and corporations. Unless otherwise stated at the time of issue, the full consideration for such shares should become corporate capital in accordance with the purpose of the parties involved.[22]

Because of the relative novelty of no-par-value shares and the consequent lack of adjudication on doubtful points such as this, and the great variety of laws in the several states, it is very uncertain as to whether courts would always hold it improper to distribute paid-in surplus as dividends. In order that this possible privilege of no-par stock may not be used to injure creditors, the law should expressly forbid the use of such "paid-in surplus."[23] Bonbright suggests that the most serious objections to no-par stock would be overcome if the law required that the *value* of the consideration for which shares are to be issued be agreed upon between the corporation

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[22] A. A. Berle, Jr., "Problems of Non-Par Stock," *Columbia Law Review,* January, 1925, pp. 43-63.

[23] The New York law (June, 1937) permits the capital to consist of either a stated value, to be named in the certificate, or the aggregate amount of consideration received by the corporation for the issuance of shares plus such amounts as the board of directors may transfer thereto. The second alternative is the desirable standard. Approval is placed upon this requirement by Robbins, *op. cit.,* Chapter IX, and by J. R. Wildman and W. Powell, *Capital Stock Without Par Value* (New York: A. W. Shaw & Co., 1928), pp. 141-142. Illinois law permits part of the consideration to be called "paid-in-surplus" and to be distributed in dividends to preferred stock if stockholders are notified of its source (Sec. 41b).

A possible exception might be made in favor of corporations formed as the result of merger. Such corporations, which receive the assets of the merged corporations as payment for their stock, might be permitted to set up as earned surplus available for dividends the sum of the earned surpluses of the constituent companies. Corporations could also be allowed to reduce their capital and return a portion to shareholders whenever that might be accomplished without injury to creditors, by complying with the same formalities by which a corporation reduces its par value and makes a liquidating dividend.

See Chapters 21 and 22 for further discussion of paid-in surplus and dividend policy.

and the subscribers and that this stated value appear in the financial reports of the company and take the place of par in measuring the stockholders' liability to the corporation and creditors.[24] As long as doubt exists, and even though specific legislation is lacking, well-informed directors will follow the safe and sound rule of instructing the accountants to distinguish carefully between the stockholders' original investment and surplus arising from earnings. Such a result will obtain if any part of the stockholders' original investment that is not credited to the Capital Stock account as "stated capital" is shown in a "Paid-in Surplus" account. While it is not so clear in meaning, accountants often use the account "Capital Surplus" to show paid-in surplus.

In summarizing the subject of no-par stock, the innovation may be said to represent an advance over the older par-value type of issue. Par value was intended to provide protection to creditors but has more frequently proved a fiction for deceiving unskillful investors. Creditors, as a class, are more informed and alert and probably never did lay the emphasis upon the protection afforded by par value which has been given to it in theoretical discussions. Other factors, such as are commonly studied in reaching credit decisions, are the actual determinants.

The absence of par accentuates the essential character of stock as shares in the ownership of the business with fluctuating value and tends to lead to more honest accounting for values. It permits the ready sale of stock at various prices from time to time, an impossibility with the fixed minimum set by par value. While this freedom may result in abuses, these are probably not of sufficient seriousness to offset the value of greater flexibility in financing.

The greatest danger of abuse lies in the risk to creditors from possible distribution of contributed capital as dividends—an uncertainty which should be remedied by amendment of the law. In the absence of specific prohibitory legislation, responsible directors will hesitate to incur personal liability to creditors lest the courts should decide to uphold the line of reasoning previously outlined in this chapter, which is in accord with some par-value cases.

Preferred Stock

General nature. The most usual reason for dividing the stock of a corporation into two classes is to give one class a prior claim upon the earnings. The stock given such prior right to dividends is called *preferred,* or *preference,* stock, in contrast to "ordinary" or common stock, which has the residual claim to earnings. Its origin has been traced to the acute financial embarrassment of the. early English

[24] James C. Bonbright, "The Dangers of Shares Without Par Value," *Columbia Law Review,* May, 1924, pp. 449-468.

transportation companies, which used it as a device to lure reluctant capital into needy corporations. [25] It has grown into an accepted and orthodox instrument of corporation finance.

Preferred stock may be issued in two or more classes, and these different classes may have successive or equal claims upon earnings for their dividends. In the absence of special qualification, preferred stock will have the same rights as the common except in the matter of dividends. Although preferred dividends must be paid before any disbursement is made to the common stock, they need not be paid if earnings are not available. In fact, the board of directors has the right to decide whether or not a dividend shall be declared even when earnings exist. Preferred dividends are normally cumulative, however (and are such unless specifically declared otherwise at the time of issue) , so that any unpaid dividends accumulate and must be met in full before any disbursement can be made to the common stockholders. Ordinarily the preferred stockholder receives no compensation for the sacrifice involved when his dividends are deferred. [26] Because of the absence of compulsion, some writers have been inclined to minimize the value of the cumulative feature, but its force should not be underestimated. [27] The right to full payment in cash of any accumulated back payments cannot be brushed aside except as the preferred stockholders waive their right. Sometimes they do this willingly, taking compensation in the form of some kind of security, stock or bond, which has immediate value, rather than wait until the corporation is able to earn enough to provide the necessary free cash. [28]

Participating preferred. After preferred stock has received its stipulated dividend in full, it does not ordinarily receive any further share in the earnings. If provision is made permitting further participation, the stock is said to be participating. [29] Cook states that

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George H. Evans, Jr., *British Corporation Finance: 1775-1850: A Study of Preference Shares* (Baltimore: Johns Hopkins Press, 1936), pp. 39-40.

[26] An unusual provision is found in the, case of the Pittsburgh Coal Company 6 per cent cumulative participating preferred stock. Unpaid accumulated dividends bear interest at 5 per cent, payable as and when the dividends are payable. Similarly, any accumulation on the 7 per cent cumulative participating preferred of A. M. Byers Company bears 5 per cent interest from the date originally payable.

[27] An extreme case of accumulation, probably the most unusual among American issues, is that of the Rutland Railroad Company cumulative 7 per cent preferred stock. The accumulation at 7 per cent from July 1, 1867, to July 1, 1938 (a receiver was appointed May 31, 1938), amounted to 497 per cent, of which 124 per cent had been paid, leaving a 373 per cent accumulation on that date.

[28] See Chapters 26 and 28 for a discussion of readjustment of preferred shareholders' claims for accumulated back dividends.

[29] Examples of participating preferred stocks are the following:

(a) Railroads—Buffalo, Rochester, & Pittsburgh Railway Co., 6% noncum. pfd.; Chicago, Milwaukee, St. Paul & Pacific R. R. Co., 5% noncum. pfd.;

when the terms of the issue are silent on the subject, the weight of legal authority is that all surplus dividends shall go to the common only.[30] When participation is provided for the preferred, it generally follows after the common has received the same amount per share as the preferred. The terms of participation may be varied in any way deemed desirable to meet the requirements of the situation. Often the participation is limited, so that, after the preferred receives a certain dividend, it no longer shares in profits beyond that point. A limitation upon the extent of participation might even appear essential to an equitable distribution as between the preferred and common shareholders. The latter might leave all, or a very large share, of their earnings in the business for a number of years. The resulting increased investment might then make possible a very handsome dividend, which would bear no relation to the investment or risk of the preferred stockholders. In spite of this possible objection, the participating feature is apparently more often unlimited than limited.[31]

Whereas preference or priority in the matter of dividends is ordinarily the protection given those willing to accept a limited claim to earnings because of their desire to reduce risk, participation represents an opposite tendency and will usually be added to the preferred feature only when the apparent risk makes it necessary to add this "bonus" feature in order to make the security salable. The value of a participating feature to the purchaser of the stock and its cost

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Chicago & Northwestern 7% noncum. pfd.; Wabash 5% noncum. profit-sharing pfd. A;

(b) Industrials—Kendall Co., $6 cum. participating pfd., Series A; Moody's Investors Service, $3 cum. participating preference; Virginia-Carolina Chemical Corp. 6% cum. participating pfd.; Westinghouse Electric & Manufacturing Co., 7% cum. and participating pfd.

[30] Cook, *op. cit.,* p. 48.

A study of participating preferred stocks made in 1938 reveals that, in the opinion of the appropriate state officials of the thirty-five states reporting, in all but two—Massachusetts and Ohio—when the charter is silent, the stock is deemed to be nonparticipating. L. L. Briggs, "Participation Rights of Preferred Stockholders," *Journal of Accountancy,* May, 1935, pp. 353-366, reviews the court decisions on this question.

[31] "In a very thorough study of types of preferred stock dividend provisions, Stevens reports that of the 1,094 preferred stocks recorded in New York Stock Exchange listing applications from 1885 through 1934, 961 were entitled to fixed initial dividends only (that is, were nonparticipating), while 133 were entitled to participate over and above the fixed initial dividend. Of the latter, 83, or about 62 per cent, divided the profits after the payment of fixed initial dividends on both common and preferred equally share for share or on some other agreed basis. Eighteen of the issues participated with the common stock after the payment of only fixed initial dividends on the preferred, while twelve of the issues were entitled, after initial preferred and common dividends, to an extra dividend in participation with the common. The remaining issues contain six other types of participation clauses. W. H. S. Stevens, "Stockholders' Participation in Profits." *The Journal of Business of the University of Chicago,* April, 1936, pp. 114-132, and July, 1936, pp. 210-230.

to the issuing corporation may be greatly limited by a provision permitting the corporation to redeem the issue. When time and circumstances make it possible to obtain the funds more economically in another direction, the participating stock can then be redeemed and eliminated.

Convertible preferred.[32] The conversion feature is another, and more usual, inducement sometimes offered when the ordinary limited return upon preferred stock is insufficient to attract investment. This privilege permits the holder to convert his stock into a stipulated number of common shares whenever he believes that it is to his advantage to do so.[33] The situations which will result in such conversion are as follows:

(a) When the dividend income of the holder will be increased sufficiently by conversion to more than offset the increased risk due to the change from preferred into common stock.

(b) When the conversion privilege is about to expire and the value of the preferred stock without the right will be less than the common stock into which it could be converted.

(c) When the stock is to be redeemed and the value of the common stock into which it could be converted is greater than the redemption price.

(d) When some special privilege of the common stock is not possessed by the preferred and constitutes a sufficient compensation for the risk of owning common rather than preferred stock. Very profitable rights to subscribe to new security issues or even the voting privilege, under unusual circumstances, might constitute the stimulus to conversion.

Before conversion will take place, it is not only necessary that one of the preceding conditions exist but likewise that the holder of the convertible issue must be unable to obtain more by selling his holdings and buying the issue into which it is convertible in the open market than he could by the process of direct conversion.[34]

The chief practical difference between the participating and the conversion privileges is that under the latter the preferred stockholders must convert and give up their preferred position in order to enjoy increased income. The conversion feature, then, has the advantage for the corporation of simplifying the capital structure,

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[32] For a discussion of the conversion feature in connection with bonds, see pp. 169-170.

A most unusual conversion privilege, which may be exercised *at the option of the company,* permits the conversion of Reading Co. second preferred into one-half first preferred and one-half common stock.

[34] In unusual cases, conversion may be made by arbitragers when they find it possible to buy the convertible issue for less than they can sell the security into which it is convertible after making due allowance for commissions and other costs of effecting the transaction.

broadening the market for the common stock, and clearing the way for possible prior issues at a later time of need.

Even under the first condition listed above, which is the most usual reason for conversion, the holder will not convert if by any chance the market value of his preferred stock is enough higher than the market value of the common into which he can convert to more than pay for any costs of switching. Thus, if a $5 preferred share convertible on a share-for-share basis into a common share paying a $6 dividend were selling for $105, while the common sold for $100, the holder of the former who desired to switch would find it advantageous to sell his preferred in the open market and buy common rather than convert to obtain the desired common stock. Such market prices as these would •seem to indicate that the market believed the higher dividend on the common was insufficient compensation for the greater risk.

Sometimes the conversion ratio is not explicitly stated; instead, the par value of the preferred (or bonds) which must be surrendered to the corporation to obtain one share of common is indicated. Thus, if a preferred with the conventional par of $100 is said to be convertible into common at 40, it means that $40 of preferred at par will be convertible into one share of common The conversion ratio is then 2i to 1, or 21- shares of common for each share of preferred. The rule in the preceding paragraph then might be stated thus: The holder of a convertible will not ordinarily convert to obtain the conversion security unless the conversion ratio (common to preferred) is enough higher than the ratio of the respective market value of the total shares to be converted and to be obtained to more than pay for the costs of a direct switch.[35] (In the preceding paragraph the conversion ratio was 1 for 1, and the market price ratio was 100 to 105, or 0.95.)

Noncumulative preferred. Whereas the participating and convertible features add something to the ordinary preference, the noncumulative feature subtracts something. When the stock is noncumulative, the stockholder loses his right to a dividend if the year passes without the directors' making any declaration. Some doubt was cast upon this interpretation of the feature by the United States Cast Iron Pipe decision, which seemed to rule that noncumulative

[35] Thus, if the market prices of the two stocks just mentioned were $100 for the preferred and $41 for the common, then the conversion ratio of 2.50 to 1 would be higher than the market value ratio of 2.44. In this case it would be clearly cheaper to obtain common by conversion than by selling preferred and buying common in the open market, for $100 of preferred is convertible into $102.50 of common. Had the common been $40, it would still have been cheaper to convert because of the factor of commissions in the open market switch. Only when the common fell below $40 by a sufficient sum to more than cover the extra costs of the open market switch would conversion be abandoned for the roundabout switch through the market.

preferred dividends, if earned but unpaid, would accumulate to the extent earned and have to be paid to the preferred shareholders before anything could be paid to the common stockholders." This unusual New Jersey case has been attributed to the existence of a New Jersey statute, a general corporation law, which, although requiring the annual distribution of all profits, nevertheless permits a corporation to accumulate and set apart a surplus or reserve fund from earnings to meet dividends, and so the court tends to give the preferred a claim whenever earnings are made. The more common point of view is found in the Southern Railway case, in which the company failed to distribute dividends on its 5 per cent noncumulative preferred in certain years in which the dividend was partly or wholly earned, until in 1923 it initiated 5 per cent dividends on both the preferred and common [37] The more recent Wabash case, involving the company's noncumulative first preferred stock, reaffirms the commonly held conception that "in the case of noncumulative stock entitled only to a dividend if declared out of annual profits, if those profits are justifiably applied to capital improvements, and no dividend is declared within that year, the claim for that year is gone and cannot be asserted at a later date." [38] The Supreme Court in this latter case mentioned the possibility of the abuse of power by directors when controlled by the common shareholders. "Their interest would lead them," the court stated, "to apply earnings to the improvement of the capital rather than to make avoidable payments of dividends which they do not share." (As a matter of fact, the Wabash noncumulative issue was voting stock and had a majority of the voting power.) The earnings so retained by increasing the amount invested in the business will tend to hasten the day on which common dividends may be declared and to increase their amount. Under the circumstances noncumulative stock may go without dividends until the corporation is strong enough to pay on the common

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" Moran v. United States Cast Iron Pipe and Foundry Company, 95 N. J. Eq. 389 (1923).

" The significance of the Southern Railway and the Cast Iron Pipe decisions is discussed in the *Harvard Business Review,* July, 1926, pp. 495-500.

" Wabash Railway Co. et al. v. Barclay et al., 250 U. S. 197 (1930). This case and that of the Southern Railway are probably best thought of as reaffirmations of the earlier Supreme Court case, New York, Lake Erie and Western Railroad Company v. Nickals, 119 U. S. 296, 307.

However, a noncumulative preferred with sufficient cash and surplus from previous years may pay dividends in the absence of current earnings. Thus, in the case of American Car and Foundry 7 per cent noncumulative preferred:

	—*Years Ended April 30* —		
	1932	*1931*	*1930*
Earned per share preferred	$8.59d	$4.69	$17.88
Paid per share preferred	7.00	7.00	7.00
Paid per share common	.25	3.50	6.00

d = deficit

as well, and may even then suffer in comparison with the common because of the limited return.[39]

The logic of resting the decision with the board of directors as to when dividends shall be declared and of not requiring any accumulation because the earnings of an isolated year happen to show a profit is threefold. In the first place, it removes the cause of possible disputes over the accounting as to the amount of earnings. If dividends cumulated whenever there were earnings, it would be to the interest of the preferred to prove that earnings were as high as possible. Secondly, the rule eliminates entirely the individual year's profits as a basis for figuring accumulations, as would be done under the United States Cast Iron Pipe decision. Such a basis is most unfair, for the profits of any single year may be much more than offset by the deficits of other years. Thirdly, the rule makes it possible for the directors to adopt a long-run point of view and build up the strength of the corporation by conservative accounting and the retention of surplus profits without concern over a growing accumulation of back preferred dividends. Since noncumulative preferred is most generally issued in reorganization, this last argument is particularly important, even though it appears to make the preferred suffer at the expense of the common shareholders. When such Spartan treatment is anticipated, suitable allowance may be made for it in the plan of reorganization that creates the several classes of securities.

Such stocks are rarely if ever issued to obtain investment funds but are ordinarily the compromise offered to security holders in reorganizations and accepted as better than complete abandonment of the investment." To use the noncumulative feature when selling stock to the public would unnecessarily lower the price to be obtained without any substantial advantage to the issuing corporation, for only a corporation paying common dividends and in a position

" So important does this apparent abuse of the right of the noncumulative preferred stockholder appear to some that they regard the principle adopted in the United States Cast Iron Pipe case as essential to equity. For a more complete statement respecting the peculiar propriety and fitness of such issues in reorganizations, see Chapter 28.

" An exceptional issue used for a special purpose is found in the 1,000,000 shares of ,noncumulative 6 per cent preferred stock with a par of $1 per share which at the time of the issue represented a majority of the voting control of the Standard Gas and Electric Co. and was owned by H. M. Byllesby & Co.

STANDARD GAS & ELECTRIC CO. CAPITALIZATION, DECEMBER 31, 1928

Prior Preference Stock	$21,000,000	No vote
Cumulative Preferred Stock	34,813,050	No vote
Non-cumulative Preferred Stock	1,000,000	1,000,000 shares
Common Stock	56,697,320	1,418,946 shares

Until March 30, 1926, when the common shares passed the million mark, this noncumulative preferred, originally issued in 1924, had a majority of the votes. The Standard Gas & Electric Co., a holding company, controlled properties valued in its balance sheet at more than a billion dollars.

to maintain its preferred dividend could float such an issue.[41] However unfortunate the customary origin of such stocks, they may in the course of time reach a respected and secure position, as in the case of the Union Pacific Railroad Company 4 per cejit noncumulative preferred, issued in the reorganization consummated in 1898.

Voting power of preferred issues. Preferred stock, like any stock, will, in the absence of any specific limitation, have the right of one vote per share. Sometimes, as in Illinois, it cannot be deprived of this voting privilege, but in general the current tendency is to modify or eliminate its right, as is permitted in most states. Because of its preferred, and presumably secure, position, it is felt that it need not have any voice in the management save when special questions arise which particularly affect its position.[42] These special questions are referred to later, under the heading of protective provisions.

Because the interests of the preferred shareholders might run counter to those of the common stockholders, and because uneven voting strength might well give one class complete control, provision might be made for separate voting, each class to elect a stipulated number of directors. If no provision of this sort is made, then care should be taken that changes in voting strength are not brought about too readily by increases in one class of stock. In 1926, when American Can Company gave its common stockholders six shares for one, thereby multiplying its number of votes by six, it increased the votes per share for the preferred stock from one to six in order to preserve proportional voting strength.[43]

Another right closely associated with the right to vote is the right to subscribe to new stock issues in proportion to one's holdings.

" The St. Louis-San Francisco Railway Company 6 per cent noncumulative preferred, which was offered to common stockholders of record on March 16, 1928, at par and accrued dividend, represents the unusual case of a noncumulative issue sold for cash.

Of the 1094 preferred stocks recorded in New York Stock Exchange listing applications from 1885 to 1934, 277, or 28.7 per cent, had full voting rights, 634, or 65.6 per cent, had voting rights only on certain questions or under certain conditions, and only 55, or 5.7 per cent had no voting rights under any circumstances. (128 issues were unclassifiable.) W. H. S. Stevens, "Voting Rights of Capital Stock and Shareholders," *The Journal of Business of the University of Chicago,* October, 1938, pp. 311-340. Dewing reported almost identical proportions among 844 individual utility preferred stocks issued between 1928 and 1930. A. S. Dewing, *Corporation Securities* (New York: Ronald Press Co., 1934), p. 194.

" At the time of the change the common and preferred stocks were outstanding in similar amounts—in round numbers, $41,000,000 of each. In 1926 the old common, with par of $100, was exchanged for new common, with par of $25, on the basis of four for one, and a stock dividend of 50 per cent was distributed on this new common, so that six new shares were received for one old one.

The votinff power of American Tobacco preferred was similarly increased from one to two votes per share when the par of the common was reduced from $100 to $50 in 1924.

With the elimination of the voting privilege the preferred stock is often created without this right to subscribe to later issues. Since the usual preferred stock is (a) nonvoting, (b) nonparticipating, and (c) entitled to only a fixed amount in dissolution, it is illogical to give it the right to subscribe to new stock issues, because this privilege would permit it (a) to acquire a share of the added voting power, (b) profit from the value such rights might have, and (c) acquire what amounts to a share in the surplus, which belongs essentially to the residual interest of the common stock.[44]

Preferred stock protective provisions. The most common provisions included in the modern preferred stock agreement protect it (a) by forbidding further issues with a prior or equal claim to earnings, except by consent, (b) by providing for gradual repayment, and (c) by giving a preference as to assets in case of liquidation. The first provision should eliminate the hazard of subsequent financing by bond issues or an increase in the preferred stock itself, which would weaken the strength of the original issue." Sometimes, when the corporation has become embarrassed, the preferred stockholders find it less disadvantageous to permit such financing than to face the consequences of reorganization or dissolution. The agreement will usually require a more than majority vote to approve such financing. However, where preferred stock is a logical device for continuous financing, the charter might provide that later issues could be issued from time to time as the directors saw fit, possibly with restrictions to the effect that earnings should bear a certain relation to the preferred dividend charges to be assumed and that preferred stock should not exceed a certain proportion of the outstanding common stock. Since successive issues might differ in such matters as dividend rate and call price because of changes in investment market conditions and the credit standing of the corporation, they could be issued in series, as Series A, Series B, and so forth. These several series would ordinarily rank alike in priority to dividends in spite of their successive issuance in point of time.

Provision for the retirement of preferred stock accomplishes the double purpose of strengthening the issue itself and gradually eliminating claims prior to the common dividend. Complete retirement would get rid of whatever limitation the protective provisions had placed upon the freedom of action of the common stockholders. The most effective way of removing the voting or vetoing power of the preferred stock is by complete redemption, if the charter and bylaws have made it callable.[46] The disadvantage of redemption from the

" These points will be clarified by the discussion of privileged subscription rights in Chapter 16.

If the agreement has been weakly drawn, it may merely forbid the mortgaging of the assets. Such a provision would be defective in that it would permit the sale of debenture, or unsecured, bonds.

standpoint of the common stockholder is that it uses funds which might otherwise be used for expansion or possibly for the payment of dividends; from the standpoint of the preferred stockholder, redemption may take his investment from him at the very time when the corporation's prosperity makes it most secure and desirable, although this loss is usually offset to some extent by the payment of a premium. A variety of redemption plans exists, but the most frequently used and the most satisfactory is one which proportions the burden according to net earnings, with some modest minimum to assure that redemption will not be entirely neglected even in the case of unfavorable business.[47]

Preferred stock is usually made preferred as to assets in case of dissolution, although in the absence of special agreement it would share in the assets on the same basis as the common The amount of the preference is ordinarily par (or a fixed sum in the case of no-par stock) plus accrued or accumulated dividends in case dissolution is involuntary; often a higher price—usually the same amount as the call price, say 110—is stipulated if dissolution or liquidation is voluntary.[48] The importance of this provision is probably overemphasized, since dissolution is likely to be the result of business difficulties, in which case stockholders usually receive little or nothing.[49]

Other protective provisions, used less frequently, are as follows:

1. The current assets shall be maintained at not less than two and one-half times the current debt or at some other ratio.
2. The net current assets (that is, current assets less current debts) shall not be permitted to fall below 150 per cent of the outstanding preferred stock.

' Even a noncallable preferred may be redeemed by making a sufficiently attractive offer. In 1930, American Shipbuilding Co. offered the holders of its 7 per cent noncumulative preferred $110 in cash or 1.1 shares of new no-par common plus $44 in cash per share. The 7 per cent preferred stock of American Radiator & Standard Sanitary Corp. is redeemable at the unusually high price of $175. This stock might presumably be purchased on the market or bid for by the company at less than the call price.

'I However, failure to make payments into the sinking fund because of inability would not be regarded as a default and the occasion of insolvency ; otherwise the arrangement would make the preferred stockholder a. creditor. Best v. Oklahoma Mill Co., 124 Okla. 135 (1926). For a more complete description of redemption or sinking fund methods, as they are used with bond issues, see pp. 175-181.

' Of 900 preferred stocks recorded in New York Stock Exchange listings, 1885-1934, which were entitled to priority in distribution in the event of liquidation, 773, or 86 per cent, were also entitled to accrued or accumulated dividends. These data are included in a very thorough study of preference as to assets: W. H. S. Stevens, "Stockholders' Participation in Assets in Dissolution," *The Journal of Business of the University of Chicago,* January, 1937, pp. 46-73.

" For an analysis of the complexities and the legal rules of preference in dissolution, see Donaldson, *op. cit.,* pp. 239-245.

3. Total assets shall be maintained equal to twice the amount of indebtedness plus outstanding preferred stock.
4. A certain surplus, or undivided profits, reserve must be built up and maintained before any common dividends are paid.
5. No common dividends shall be paid until earnings are equal to twice the preferred dividends.

If these provisions are to have force, the preferred stockholders must be given representatives to see to their enforcement or must be allowed to acquire voting power upon the corporation's failure to observe them. When a corporation fails to pay its preferred dividends for a period of a year, the right to elect a majority of the board of directors frequently passes to them, and some such provision would seem to be but fair when a corporation fails to maintain the protective standards agreed upon. The principle of priority having been insufficient protection for their dividend, a voice in the control becomes logical. However, voting power to the extent of full control, or control of the majority of directors, might be an excessive penalty in the case of a small preferred issue, especially one almost completely retired by sinking fund. Such a right might encourage a raid for control by some hostile group, such as a business competitor.

Preferred issues in current practice. An examination of current preferred stock issues made to the public will show that in the majority of cases they are arranged to resemble a bond issue—that is, a debt—as far as practicable. This similarity may be seen by a study of customary preferred stock provisions." The following list also shows the usual status of preferred issues where the charter is silent. To avoid possible dispute and litigation, the charter should always be clear on these points.

Customary Status	*Usual Legal Status if Charter Is Silent*
Cumulative	Cumulative
Nonparticipating	Nonparticipating
Nonvoting	Voting
No maturity	No maturity
Sinking fund	No sinking fund
Callable	Noncallable
Preferred as to assets over common	Share in assets equally with common in event of liquidation

" Keister reports an examination of 157 preferred stock issues made in the years 1916-1921 inclusive. Ninety per cent of the issues were callable at prices ranging from 100 to 125, but about one half at 110. Eighty-two per cent imposed a sinking fund. Material is also presented on the subject of protective covenants and customary penalties for their nonobservance. A. S. Keister, "Recent Tendencies in Corporation Finance," *Journal of Political Economy,* April, 1922, p. 257. A. S. Dewing reports similar percentages .for a larger and more recent group of preferred stock issues in *Corporation Securities,* Chapter 5.

After the characteristics of the bond have been considered in the next chapter, the place of preferred stock, standing intermediate between bonds and common stock, can be better appreciated. The relative merits of preferred issues are most appropriately considered in a discussion of proper financial plans for the various kinds of business corporations.

Classified common stock. The decade of the 1920's witnessed the growth in popularity of a virtually new device—classified common stock.[51] The germ of the idea may be found in the older classification of preferred and ordinary shares. Very often an examination of Class A and Class B shares will show them to be merely the old-time preferred and common stocks with new names. The Class A stock may, however, be anything from a conventional old-style preferred issue to a common stock differing only from the B stock in the lack of voting power. Perhaps most often Class A stock is a no-par issue, preferred as to dividends and assets, without voting power, very often noncumulative, and associated with the financing of industrial and holding corporations where considerable speculative risk exists. As compensating features, the issue may be callable only at a high price, be participating, and possess other features permitting it to share with the common should the prosperity of the company greatly increase. By using the term *common* instead of *preferred* in its title, Class A stock will tend to appeal more strongly to speculatively inclined purchasers, a feature of considerable value when an issue is being sold in a time of heightened interest in common stocks. The merits and weaknesses of such a stock can be properly appraised only after a careful study of the provisions of the particular issue and the character of the corporation and its management."'

"A. S. Dewing suggests three main reasons for the sudden prominence of classified common stock: (1) investor-speculators' demand for profit-sharing securities, but of the type providing the appearance of greater security than that offered by ordinary common shares; (2) the desire of management to sell a type of common stock which did not share voting rights; (3) the desire of bankers and investors for "something new." *Corporation Securities,* pp. 196-197. The second of these points appears to have had declining importance at least since the late 1920's, for a large number of the later issues of classified common have voting power. See also A. S. Dewing, "The Development of Class A and Class B Stocks," *Harvard Business Review,* April, 1927, pp. 332-339.

"Some of the possibilities are indicated by the following illustrations:

(a) An ordinary preferred issue. Coca-Cola Company Class A stock, issued in 1929, has preference to the extent of a $3 cumulative dividend per annum and is redeemable at $52.50 and accrued dividend. It is nonvoting unless two semiannual dividends are passed.

(b) A participating preferred. General Outdoor Advertising Company participating Class A stock, offered in February, 1925, at $46.50 and accrued dividends, is entitled to a $4 cumulative preferred dividend and participates share for share with common after common receives $2 until the dividend

Other Types of Stock

Guaranteed stock. Preferred stocks are sometimes erroneously called guaranteed. Properly speaking, a guaranteed stock is one the dividend of which has been unconditionally guaranteed by some person or corporation other than the corporation of original issue. The guaranteeing corporation, unlike the issuing corporation, must pay the agreed dividend or admit insolvency. The guarantee may arise as the result of the lease of one corporation's property by another; the stock of the former is guaranteed by the latter as a part of the rent for the lease. By this method the latter corporation avoids the problem of raising new funds to pay off the securities of the other corporation.'" A corporation may guarantee a new issue of another corporation in which it has a substantial investment in order to facilitate the sale of the securities rather than put out its own securities.[54] In the event of a default of a guaranteed dividend, the stockholder has a double protection; he has a claim as a creditor against the guaranteeing corporation and his original rights as a stockholder, which he possessed before the guarantee.

Debenture stock. The term *debenture stock* is used but seldom in this country, and then inappropriately to designate preferred stocks; inappropriately because *debenture* in its derivative sense means *owing* or *debt,* and because *debenture* has been quite generally used to describe a class of bonds with which debenture stock might be confused.[55] In English practice the term *stock* may be applied

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reaches $6. The issue is callable, is preferred as to assets, and follows an issue of 6 per cent cumulative preferred stock.

(c) A nonvoting common. R. J. Reynolds Tobacco Company common (sometimes referred to as the "A" stock) is like the Common B save that only the latter has voting power. All other rights are alike for the two classes of stock. The same situation exists for American Tobacco Company Common and Common B.

"The Delaware, Lackawanna and Western Railroad Company guarantees an annual dividend of 7a per cent on the Morris and Essex Railroad Company (common) stock. The Morris and Essex is leased in perpetuity to the Lackawanna and is a vital portion of the latter's system, constituting its only entrance into New York harbor.

The Pennsylvania Railroad Company guarantees the dividend of the Pittsburgh, Fort Wayne & Chicago Railway Company 7 per cent preferred stock. The latter is an unmortgaged road leased for 999 years and constitutes the main line of the Pennsylvania between Pittsburgh and Chicago as well as owning the terminals in those two cities.

Armour & Company (Illinois corporation) guarantees the 7 per cent preferred stock of Armour & Company (Delaware corporation), a wholly owned subsidiary.

" General Motors 6 per cent debenture stock was a cumulative preferred stock ranking *pari passe* with an issue of 6 per cent cumulative preferred and ranking after an issue of 7 per cent cumulative preferred. In 1930 these three issues were exchanged for the present $5 cumulative preferred stock. E. I. du Pont de Nemours & Company 6 per cent debenture stock (called in 1939) and Dennison Manufacturing Company 8 per cent cumulative debenture stock are similarly cumulative preferred issues.

to indebtedness, and so *debenture stock* is used appropriately to describe bond issues the exact nature of which may be ascertained only from the indenture, or agreement. English debenture stock may be secured by a mortgage.[56]

Deferred stock. Deferred stock is another class of issue that is seldom used in this country. As the name implies, its right to dividends comes after that of the common or ordinary shares.[51] When the deferred stock is issued to the promoters of the corporation, it may be called founders' stock.[58] Because the common shares which precede such deferred stock ordinarily contribute all the actual property and the latter possess only a claim against problematical future earnings, their naming seems more appropriate than the more frequently employed terms of *preferred* and *common stock.* The same results can be obtained by using classified common stock instead of common and deferred shares."

Bankers' shares. Other stock titles have been devised by the fertile imagination of promoters and financiers, but rarely do they accomplish any function not cared for by the classes already de-

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" General Electric Company, Ltd. (Great Britain), 7 per cent mortgage debenture stock is secured by a first mortgage and succeeded by two classes of cumulative preference shares as well as ordinary shares. Canadian Pacific 4 per cent irredeemable consolidated debenture stock, issued partly in United States dollars and partly in English pounds sterling, is also a bond issue. It is subject to some minor mortgage bonds existing at the time of its issue and succeeded by 4 per cent noncumulative preferred stock and ordinary stock, An unusual feature is its right to vote in the event of default in interest for 90 days.

" In 1925 the Joint Stock Securities Company of Massachusetts was formed with capitalization of $1,000,000 common stock and 500 shares of this deferred stock of no par value. The common was entitled to cumulative preferred dividends at the rate of 6 per cent. After these had been paid and after $6 per share plus an amount equal to 5 per cent of the entire net earnings for the preceding year had been paid upon the deferred shares, any further dividends were to be distributed ratably among the common and deferred stock share for share.

Imperial Airways, Limited, created an issue of 25,000 deferred shares of 11 each, fully paid up, and gave them to the British Government, whereupon the latter canceled all liability of the corporation for previous subsidies. After the payment of a 10 per cent dividend to the ordinary shareholders, half of any remaining profits was to be distributed as an extra dividend on the ordinary shares and half as a dividend on the deferred shares.

58 American Brown Boveri Electric Corporation, originally the New York Ship Building Corporation, provides one of the rare examples of founders' stock in this country. Unlike the usual founders' shares, they were issued in units with 7 per cent preferred stock and participating stock to the shareholders of the predecessor corporation. From 1925, the year of incorporation, to January 1, 1929, all net earnings after the preferred dividend, whether or not declared as dividends, were to go to the participating stock. Thereafter all net profits were to be declarable, 65 per cent to the participating and 35 per cent to the founders' stock. All voting power lay in the founders' stock unless the preferred passed four quarterly dividends, in which case these two classes of stock would have equal voting power, class for class.

" See footnote 19, p. 92, in regard to the Dodge Brothers common stocks A and B.

scribed. An exception, however, is the term *bankers' share,* which came into rather common use during the 1920's, not as a name for any class of stock but to describe the stock of certain investment trusts or "intermediate" corporations designed to facilitate the distribution of the shares of certain corporations. The stock of a particular corporation which is highly rated may sell at a very high price. Stocks selling in excess of $100 per share are sometimes called in the financial district "rich men's stocks" or "blue-chip stocks." Such a stock, or more probably a number of such stocks, which would offer the small investment purchaser diversification, are bought in the open market by an investment banker or syndicate and deposited with a trust company, and a large number of shares of small denomination, representing a fractional interest in the deposited stock, are sold to the public. Since the deposited stocks are quite well known and are quoted daily, the purchaser can and should investigate the value of the securities behind his bankers' shares. Otherwise the small investor may find he is paying an excessive price for the convenience of small denomination. In some instances this device has been used fraudulently to obtain an absurdly high price, the vendors depending upon the known reputation of the deposited stock to aid them in extracting the excessive price. The practice has no importance in itself for the corporate financier, but it suggests to him the advisability of keeping the value of the individual share of his corporation low enough to be convenient for probable buyers.

Summary

This chapter has reviewed some of the more important technicalities relating to the issuance and transfer of the stock certificate and has described the various kinds of stock. While the old twofold division of common and preferred stock is still predominant and will doubtless continue so, the recently popular classified common stock is more flexible and, by avoiding the use of the more conservative-sounding "preferred" title, more truthfully indicates the speculative character of the kind of issues which are characteristically so named. Less frequently used terms, such as *guaranteed, debenture, deferred,* and *founders' stock* are also mentioned. No-par stock, which is relatively new, is still in a state of change and even some uncertainty, but it should be given the most careful attention by the student of the subject because of its rapid growth in importance. While usage has been touched upon, it has been covered only incidentally and for purposes of emphasis. Usage, or practice, has been deferred for the most part until after a discussion of the other important class of securities, bonds. At that point we shall come to the problem of financing specific types of enterprise.

CHAPTER 6

CORPORATION BONDS

General

Bonds and stock compared. The preceding chapter was concerned with the various forms which *ownership* takes in the corporation; this and the next two chapters are devoted to the instruments involved in making long-term debt arrangements. The creditors of a corporation in some instances supply a greater portion of the permanent capital than do the owners. Although various developments of workaday finance have done much to blur the borderline between creditors and owners, the legal difference between the two classes should be kept in mind, the former with their fixed claim to interest and principal, which must be satisfied before the owners may receive anything, and the latter with a right to whatever surplus of income or property may remain after the former claims are met. Bondholders are paid interest for the use of their money; stockholders receive dividends when earnings and financial policy permit.

A summary of the normal characteristics which distinguish bonds from stocks would read as follows:[1]

1. The obligation to bondholders, together with that to other creditors, constitutes a *prior* claim, which must be met in full before anything can be paid to any stockholder.

[1] Rare, or at least unusual, forms of bonds can be found as exceptions to each of the listed rules.

(a) The Green Bay & Western Railroad Class B income debenture bonds are paid only after Class A income debentures and the common stock have received 5 per cent upon their par value. After the specified payments have been made to the two prior issues, the Class B debentures are entitled to any and all further disbursements. Although the A debentures and the common stock received 5 per cent regularly from 1904 to 1932, and partial returns thereafter, the B debentures have never received more than a small and variable income.

(b) Income bonds, a very minor class of bonds which are very much like preferred stock, have a claim to interest which is contingent upon earnings. See p. 171.

(c) Participating bonds, a very unusual form of bond, are entitled to participate in earnings in excess of the ordinary stipulated rate according to the terms of the contract. For example, Siemens & Halske, A. G., participation debentures of 2930, are entitled to interest at the same rate as the dividend rate on the common stock but are not to receive less than 6 per cent.

(d) The Public Service Corporation of New Jersey perpetual 6 per cent certificates and the United Railways & Electric Co. of Baltimore income 4's are perpetual. In British practice, funded debt is sometimes issued in the form

2. The interest to bondholders is a constant claim, which *must be met regularly in order to avoid insolvency* regardless of earnings or financial condition. Dividends to stockholders are possible only when earnings warrant, and even then are paid only at the discretion of the board of directors. Because of this difference the payment of interest upon a bond is spoken of as a *fixed charge,* while the fixed dividends paid upon preferred stock are spoken of as *contingent charges.* Income bonds are an important exception to this rule. Their interest is a contingent charge.

3. Bond interest is always a claim for a fixed amount; payments to stockholders may or may not be a constant sum.

4. Bonds have a maturity date upon which the principal sum is repaid; stocks have none.

5. Bondholders have neither voting power nor voice in the management so long as their obligations are met by the debtor corporation. The holders of stock, save when a certain class is specifically nonvoting by the terms of its issuance, have the power to control the business through the election of directors.

Period of credit. Short-term credit arrangements for a period of less than one year, such as are extended by commercial banks, merchandise creditors, and certain specialized credit institutions, are treated in Chapters 19 and 20. Longer-term credits, running one year or more, are our concern in this chapter. Instruments which evidence such longer term credits are known as bonds and notes, or the funded debt of the corporation. Bonds and notes differ in the matter of maturity, or the length of time that they have to run. "Short-term notes," or "notes," as these terms are used by the bond house and the investor, cover instruments which may have a maturity of anywhere from one to ten years, although three and five years represent the more common periods. These instruments are not to be confused by the student of corporation finance with the shorter-term promissory notes, which characteristically run from thirty days to six months, are less formal in nature, and are customarily given to evidence bank loans. Even though their legal nature is alike, their use in finance differs, as does their method of sale and their probable market, as will appear later.

Reasons for issuing bonds. Before passing on to the description of the bond and the various forms which it takes, the reasons for its

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of "annuities," which are perpetual but may be subject to redemption. Some bond issues, particularly of railroads, are of such long maturity as to make them virtually perpetual for practical purposes.

(e) Voting rights at stockholders' meetings of the Erie Railroad are held by owners of the consolidated prior lien of 1996 and general lien 4 per cent bonds of the same maturity. Each $1,000 bond has ten votes. Since these two bond issues aggregate over $70,000,000, they were formerly in a position to control the policy of the company jointly with the first preferred stock.

use might be stated. Granted that funds are needed in the operation of the business and that the need is "economic" in the sense that the desired funds will probably earn an adequate return, why should the corporation obtain them by the issuance of bonds rather than stocks? The answer may lie in either necessity or mere expediency. Bonds may be the only alternative open, either because the company's condition is such that its stock would not readily sell and the money could be obtained only by offering the greater security of a bond, or because the market for the company's stock is such that it could not be sold except at a disadvantageously low price. But, even if stock could be disposed of, an issue of bonds might be preferable for the following reasons:

1. *To avoid sharing the voting privilege.* Whenever a corporation issues new voting shares, the former stockholders must increase their holdings in the ratio which the new stock bears to the outstanding stock if they wish to continue to wield the same proportion of voting strength as before. Often an increase in their investment seems undesirable or inopportune. If voting power is important to the stockholders who are potent in the councils of the corporation, bonds or a nonvoting preferred stock are a likely solution.

Dilution of voting power may, however, be more apparent than real. The sale of stock over a wide area in the form of many small holdings will create votes that are likely to give their support in the form of proxies to the existing management, except under the stress of unusual circumstances and financial disappointment. Such stock sales may actually diminish the potential strength of larger stockholders not already represented on the board of directors.

On the other hand, even though bonds have no voting power, the investment bankers who buy and distribute such an issue may demand and receive a voice in controlling the affairs of the corporation. Such "banker control" is more likely to exist if the business is having some difficulty in finding a buyer for its bonds. In some instances, a large measure of control might seem essential to the bankers to protect the interests of customers against inept or speculative financial policies.[2]

2. *To enlarge the possible sources of funds.* The use of bonds taps a capital market unavailable to the corporation which offers only stock. The market for the stock of a corporation may be limited. Whether narrow or broad, it does not include those institutions, such as life insurance companies and banks, that are required to limit their investments to credit instruments. This point is less important for industrials than for utilities and railroads, and is more important for the latter groups when the business is expanding

[2] For further comment on "banker control," see Chapter 14, "Investment Banking."

rapidly and needs to tap every possible source of funds in order to fill its needs as expeditiously and cheaply as possible.

But bonds may mean more than just one more device for raising funds. On occasion, an industrial corporation may find that its stock is almost unmarketable on any reasonable terms and that bonds are the only practical course. This situation may exist for almost all lines of business when the business cycle has reached the depression stage and the stock market is in the doldrums. Or, the corporation may be in a branch of industry that is in disfavor among investors. While bonds will suffer as well as stocks, their market may persist if the amount sought is small enough so that the new issue can pass the customary tests of safety by more than the usual margin. Again, smaller industrial corporations find that their stock invariably suffers in marketability because of their size and even more because of a lack of distribution of the issue. Such concerns, if not too small, are especially likely to find the bond market a more available, or even the only, source of funds.

3. *To lower the cost of funds.* Because the investment market attributes less risk to bonds than to stocks, a corporation can ordinarily sell the former for a promised rate of return that is lower than the yield inducement offered by its stock. A manufacturing corporation that might borrow on bonds for 5 per cent might have to hold out the hope of earnings of 8 or 10 per cent upon its common stock in order to find buyers. The interest rate upon the bonds is fixed by contract, while the earnings of stock are wholly contingent upon what future earnings may bring. For that reason the stock of a particular company may actually return less than a bond. But at the time of the financing, the outlook—usually gauged by the past record—must indicate earning power available for the prospective stock issue higher than the going rate for bond interest. Stock buyers will not necessarily require that the expected dividend rate exceed the bond interest rate but may be satisfied if the anticipated earnings per share are more generous. Undistributed earnings of a successful industrial may so increase the property and earnings of subsequent years that the market value of the;stock will appreciate considerably more than the amount of dividends sacrificed by the stockholder.

Occasionally the puzzling situation is found where not only the dividends but even the current earnings are a lower percentage upon the market price of a company's stock than the yield offered by its bonds. Such an apparent anomaly would argue that the corporation would save by selling stock rather than bonds. Examination is likely to reveal, however, that the high market price of the stock is a reflection not of the current earnings but of widespread hopes for future growth in earnings. If such expectations are sound, the

corporation may find it good policy to sell bonds. The interest cost of the issue may prove to be less than the share in earnings which the old stockholders would have given up as a result of a new stock issue. It can be argued that this consideration is of importance to the stockholders rather than the corporation and that the latter is always best served by financial conservatism and the avoidance of debt where possible. Aside from the fact that corporate policy is supposed to be guided in the interest of maximizing the profits of its owners and not of any corporate abstraction, the judicious use of debt for the purpose of making as good an investment record as possible for the common stock will enable the corporation to finance with a minimum of difficulty.

However, when the stock market as a whole becomes so buoyant as to make the rate of return from stocks lower than that from bonds, it is likely to indicate that excessive optimism which presages a business reaction. At such a time bonds would for most companies be an undesirable if not actually a dangerous form of financing.

The creation of two different types of instrument in order to fit different preferences may well represent a social economy. The more cautious person or institution assuming the more moderate risk associated with bonds may have great need for security because of a lack of information, a lack of opportunity for investigation, or a lack of means to bear potential losses. In general, the investor of small means does not have the ability to weigh risks or to obtain sufficient diversification to assume them. Similarly, the aged, because of their short life expectancy and their dependence upon investment income, require a higher degree of certainty than the young and middle-aged. Many of our major financial institutions, such as the commercial bank, the savings bank, and the life insurance company, are not adapted to the purchase of stocks, because their major obligations are payable in a fixed number of dollars. It is desirable from the standpoint of society that those who can best afford to assume these hazards and bear losses when they do occur should assume the position of stockholders.

4. *Trading on equity.* The use of borrowed funds (or stock with a limited return) is known as *trading on equity.* The customary reason for trading on equity is the hope of employing these "senior" funds at a rate of return higher than their cost in order to increase the return upon the investment of the residual owners. The investment of the common stockholders serves as a protection both to the income and the principal of the bondholders. Stockholders, then, "trade" on the strength of their "equity." If earnings are high, they profit by the transaction; if earnings are poor, they lose by having to pay more in interest than the added capital earns. They even risk the partial or complete loss of their own investment if conditions

grow so bad that the corporation is unable to fulfill its contractual obligation to bondholders.

TABLE 4

TRADING ON EQUITY-ILLUSTRATIVE FIGURES

	Year					
	1st	*2nd*	*3rd*	*4th*	*5th*	
1. Total net income	$120,000	$160,000	$200,000	$60,000	$10,000	def.
2. Interest on bonds 6% ..	60,000	60,000	60,000	60,000	60000	
3. Balance for stockholders	60,000	100,000	140,000	0	70,000	def.
4. Per cent earned on total investment	6	8	10	3	0.5	def.
5. Per cent earned on stockholders' investment	6	10	14		7	def.

A simple illustration of the effects of trading on equity may be had from the figures given in Table 4, which are charted in Figure 6. The investments of the stockholders and the bondholders are assumed to be $1,000,000 for each throughout the period. The total

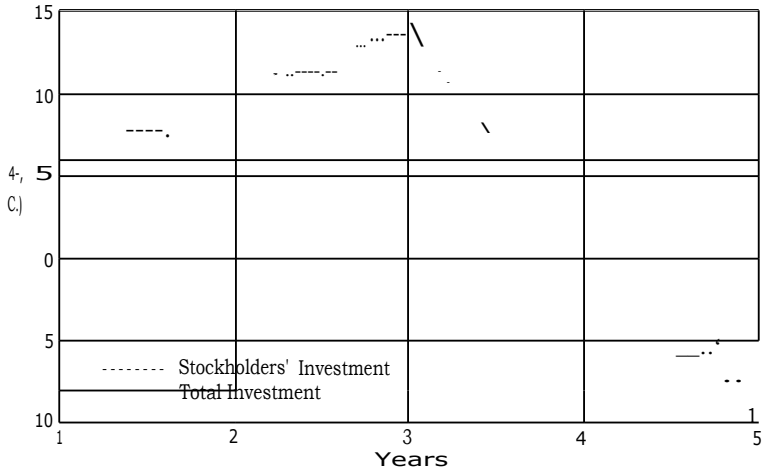

Figure 6. Effects of Trading on Equity. Return upon Total and upon Stockholders' Investment under Various Earning Conditions.

net income available for the security holders is shown in the first line, and the percentages which these amounts are of the total investment of $2,000,000 are shown in the fourth line. After the 6 per cent fixed charge payable to the bond is subtracted, the balance for the stockholders appears in the third line and is shown as a percentage upon the $1,000,000 investment of the stockholders in the

last line. The two percentage return series are charted in Figure 6, which brings out the two points about trading on equity that should be remembered:

1. It increases the degree of fluctuation in the rate of return upon common stockholders' investment. Without it the percentage return is simply that earned upon total investment; subtraction of a fixed amount for a senior security leaves a more variable margin for the common Because trading on equity magnifies the influence of fluctuations like a lever, the expression "capital structure with high leverage" is applied where a large proportion of senior securities come ahead of the common stock.

2. Success, as measured by the increased returns to the stockholders, depends upon the excess of the rate earned on investment

TABLE 5

PERE MARQUETTE RAILWAY COMPANY
CAPITAL STRUCTURE, DECEMBER 31, 1926

	Amount (millions)	*Per Cent of Total*
Funded debt	$ 52.0	36.6
Preferred stock	23.6	16.6
Common stock	45.0	31.7
Surplus	21.5	15.1
	$142.1	100.0

	1926	*1928*	*1930*	*1932*
Gross income before interest (millions). . .	$10.3	$11.1	$ 4.9	$ .6
Per cent earned on total capital structure	7.2	7.4	3.2	.4
Per cent earned on net worth	8.5	8.9	2.3	3.8 def.
Per cent earned on common stock equity.	9.8	10.0	1.3	7.6 def.

Source: *Poor's Railroad Volume,* annual.

over the rate paid for the borrowed money; failure is the extent to which the former rate falls below the latter. When, as in the fifth year, total earnings are insufficient to cover the interest charges, the stockholders are obliged to dip into their capital to keep the business from insolvency. If the burden of interest becomes too great, the interest payments or maturing principal will cause insolvency, and, even when that result does not follow, the financial position of the business may be greatly weakened, maintenance neglected, and the property placed in a disadvantageous competitive position.

The record of the Pere Marquette Railway Company, which is indicated in Table 5, illustrates the effect of heavy debt on common stock earnings throughout a cycle. While the amount of funded debt outstanding increased during the period, the changes were not substantial enough to alter the results significantly.

Experimentation with such figures as those given in Table 4 will reveal the extent to which an increase in borrowing will heighten both the opportunities for handsome profits to the stockholder and the possibilities of catastrophic loss. Preferred stock offers very similar opportunities to bonds in making trading on equity possible for the common stockholders.

Factors limiting the use of bonds. A study of the illustration should serve to emphasize the first, and basic, restriction upon trading on equity—namely, that permanent borrowing should be undertaken only in so far as there is a reasonable stability of income which will make the required payments to the bondholders fairly certain. To employ bonds beyond a proper point is to court disaster for all concerned. If pursued on a sufficiently large scale, the excessive use of credit even becomes a menace to economic society by rendering it excessively sensitive to the shock of adversity. Business failures, especially when involving considerable sums, set up repercussions which affect many businesses and individuals beyond the immediate circle of the debtor and creditor and may produce a wide area of loss and depression. The Quaker precept of moderation in the assumption of debt risk sets up an ethical standard for business conduct that is particularly appropriate in the complex and highly interrelated economic fabric of today.

A second limitation upon trading on equity is the cost of the borrowing. As the proportion of funds borrowed from bondholders increases, there is a decrease in safety, which tends to increase the rate of interest paid until that rate becomes prohibitive. This check would presumably exist in a perfect market in which lenders were thoroughly competent to measure the risks involved.

A third limitation, which is of more practical virtue in effectively preventing excessive borrowing, is the bar of usage. Custom or usage builds up standards of the regular and usual beyond which those institutions which distribute and those who purchase bonds will not go in their acceptance. Since the fruits of experience do not always reappear in the same form on the tree of tomorrow, usage will neither gain universal observance nor guarantee certain safety. Nevertheless it plays an extremely useful part in the work of finance.

General form of bonds. All bonds, whether specifically secured or not, are in effect long-term promissory notes, but they differ from ordinary notes in that they are more formal and their provisions are much more complex. Three parties or groups are involved in every bond issue: the debtor corporation, the bondholders, and the trustee (s). Because the ownership of the bond may change frequently, and because of the difficulties of making separate contracts with a large number of individual creditors, the basic contract, or *inden-*

tore, is made out between the corporation and the trustee (usually a trust company). In the indenture all the provisions of the borrowing are carefully set forth. The bond instrument itself merely contains a promise to pay a certain specific amount of the total debt with interest, and gives a summary of the main terms of the borrowing. The bondholder must look to the indenture for the full details of the issue. Any ordinarily well-constructed bond certificate recites a number of points which are commonly taken for granted by the initiated, but which are worth listing here at the beginning of the discussion. An illustrative instrument is shown in Figure 7.[3]

1. Title of bond. At the top of the instrument will appear the title of the bond issue, which in the illustration reads, "The Detroit Edison Company General and Refunding Mortgage Gold Bond Series E, 5%, due October 1, 1952."

The title should include the full name of the debtor corporation, some word or phrase usually indicative of the nature of the security, the interest rate, and the maturity date. The omission or contraction of some part of this title in a business transaction may result in a troublesome, and even expensive, error. Another corporation may have a similar name, or the same corporation may have more than one bond issue, which may be a source of confusion.

2. Denomination. The initial clause states the promise of the debtor corporation to pay a principal sum upon the final due date for maturity. The usual amount, or denomination, is $1,000. Some of the bonds of an issue may be in denominations of $500 and $100 in order to meet the requirements of the small individual investor.[4] The term baby *bond* is sometimes applied to the one-hundred-dollar-denomination bond. Because of the additional care in handling the greater number of instruments, ten of these bonds are not "good delivery" upon a sales contract for one thousand dollars worth of an issue on the New York Stock Exchange, although two five hundred dollar bonds may be so used. The popularity of bonds among small investors was greatly increased by the Liberty Loan campaigns of the Federal Government. During the World War, large numbers of one-hundred-dollar and fifty-dollar bonds were distributed, thereby immensely increasing the number of people acquainted with bond investments.

For purposes of brevity, only the title and the first and last paragraphs of the bond are reproduced in full. Condensed statements of the middle paragraphs are given.

Denominations which are multiples of $1,000 are possible but unusual. Civil finance has the chief exceptions. The Federal Government, with its huge issues running into nine and even ten figures, offers denominations of $5,000, $10,000, $50,000, and $100,000. Sometimes when a municipal issue is not for a round sum, one bond will be created for a fractional part of a thousand dollars, such as 93.

3. *Money of payment.* The phrase "will pay in gold," or more commonly "will pay in gold dollars of the present weight and fineness" is a reflection of the uncertainties of our national money system that followed the Civil War. The student of monetary science

UNITED STATES OF AMERICA

State of New York

THE DETROIT EDISON COMPANY

General and Refunding Mortgage Gold Bond

Series E, 5%, Due October 1, 1952

THE DETROIT EDISON COMPANY (hereinafter called the "Company"), a corporation of the State of New York, for value received, hereby promises to pay to bearer, or if this bond be registered, to the registered holder thereof, on the first day of October, 1952, at its office or agency in the Borough of Manhattan, City and State of New York, the sum of

ONE THOUSAND DOLLARS ($1,000)

in gold coin of the United States of America, of or equal to the standard weight and fineness as it existed on the first day of October, 1924, and to pay interest thereon from the first day of October, 1932, at the rate of five per cent (5%) per annum, in like gold coin, at said office or agency of the Company on the first day of April and the first day of October in each year, until the Company's obligation with respect to the payment of such principal shall be discharged as provided in the Indenture hereinafter mentioned, but only upon presentation and surrender of the interest coupons attached as they severally mature.

[Tax deduction paragraph (no tax paid at source in this case).

[Description of the issue and the series of which this bond is one.

[Redemption clause.

[Principal and interest declared due and payable in case of default.

[Provisions for registration and transfer.

[Coupon bonds may be exchanged for registered bonds.

[Incorporators, stockholders, and officers may not be held for the principal and interest.

[Trustee must execute the certificate to make bond and coupons valid.]

IN WITNESS WHEREOF, THE DETROIT EDISON COMPANY has caused this bond to be signed by its President, or one of its Vice-Presidents, and its corporate seal to be hereunto affixed and the same to be attested by its Secretary or one of its Assistant Secretaries, and coupons for said interest bearing the facsimile signature of its Treasurer to be hereunto attached, as of the first day of October, 1924.

THE DETROIT EDISON COMPANY

(Seal)

Attest: ..... By .....
Secretary Vice-President

Figure 7. Illustrative Coupon Bond.

will recall that the "greenback" inflation during that war was ended by the resumption of gold specie payments in 1879. Subsequently the political activities of the free-silver advocates created fear as to the possibilities of another period of price inflation and a disruption of international exchanges by a flood of cheap silver money. The

"gold clause" dates from this period. After the defeat of that movement with the election of McKinley in 1896, the "gold clause" was felt to have little if any practical significance. The unhappy results of inflation for bondholders were illustrated, however, by the monetary history of a number of European countries after the World War period. As their paper currency was inflated and gold redemption was abandoned, the income of the bondholder, even though "paid scrupulously," gradually shrank in purchasing power until in cases like that of Germany it reached zero. [5]

On June 5, 1933, Congress passed a resolution declaring "every provision contained in or made with request of any obligation which purports to give the obligee a right to require payment in gold or a particular kind of coin or currency, or in an amount of money of the United States measured thereby" to be against public policy. Subsequently, through Federal legislative and executive orders, the gold content of the dollar was reduced approximately 40 per cent, and all gold coin and gold certificates were withdrawn from circulation. When an attempt was made by a bondholder to enforce the gold clause in a corporation bond, it was held to be invalidated, and the Supreme Court, by a five-to-four decision, upheld the Federal Government.[8] Bonds issued since 1933 have merely provided for payment in "lawful money of the United States of America."

4. *Interest rate.* The rate of interest paid to the bondholder is expressed as a percentage of the face, or par amount, of the bond. While any rate might be used, a rate is usually employed which is a multiple of one half of one per cent or, less frequently, one fourth of one per cent.? If such a round rate does not exactly express the proper rate of return for the company's credit standing and the merits of the particular bond issue, the price of the bond is adjusted so as to give the investor the desired yield. The discount under (or the premium over) par represents a gain (or loss) to the purchaser of the bond, a part of which is added to (or subtracted from) the regular interest in order to obtain the true income to the investor and the effective cost of borrowing to the corporation. [8]

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6 The Rand Kardex Co. stabilized 7 per cent debentures of 1955 were issued in 1925. This unique bond was designed to give the investor constant purchasing power and so to guard against even such variations as might occur in the purchasing power of the gold dollar. A suitable adjustment was to be made in the amount of interest or principal paid whenever average prices varied by as much as 10 per cent, as measured by the United States Bureau of Labor Statistics. See Irving Fisher, "The Stabilized Bond—A New Idea in Finance," *Annalist,* November, 13, 1925, p. 603.

' Norman v. Baltimore and Ohio Railroad Company, 294 U. S. 240 (February 18, 1935).

The bonds of the Federal Government often use multiples of one eighth of one per cent.

' For the mathematics of computing bond yields, see Justin H. Moore, *Handbook of Financial Mathematics* (New York: Prentice-Hall Inc., 1929), p. 407

5. *Coupon or registered form.* In the illustrative bond form the principal sum is payable to the bearer of the bond, and the interest is payable "upon presentation and surrender of the coupons attached." Bearer bonds of this type are called *coupon bonds* because of this method of interest payment. Since the corporation has no certain knowledge of the owner of a bearer instrument of this sort, it requires that the bond be presented and surrendered at maturity before making payment of the face amount. Similarly, the holder would be obliged to present his bond as evidence of his ownership on each interest date were not provision made by attaching a sheet of coupons, one for each interest payment.° The coupons for the interest payments, ordinarily occurring at semiannual intervals, are clipped from the sheet at the proper times and presented at a named bank or the office of the debtor corporation. Ordinarily coupons are made payable at a banking institution in order to simplify collection. In effect, the coupon is a post-dated check for the amount of interest. Should a coupon be clipped prematurely and lost, the bond would not be readily salable again until after the maturity date of the missing coupon had been passed.

The reader acquainted with the elements of commercial law, or more especially the law of negotiable instruments, will be familiar with the essential character of a bearer instrument such as the coupon bond. One of the most practical considerations is the risk of losing title should such a bond come into the hands of an innocent purchaser—that is, one without knowledge of its having been lost or stolen. To insure against such a misfortune, coupon bonds are ordinarily kept in safety vaults and given every safeguard when it is necessary to transport them.

Bonds may be issued in registered as well as in coupon form. (In the illustrative bond above, registration of principal is optional.) Registration places legal title in the person whose name

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et seq. Since a compound interest element is involved, the work of computation is simplified by the use of proper tables. When the price of the bond is known and the rate of return is sought, such a table as the *Yields of Bonds and Stocks,* by D. C. Johnson and others (New York: Prentice-Hall, Inc., rev. ed., 1938) is most satisfactory. When the net yield has been given and the proper price which will result in that yield is to be determined, the several tables of the Financial Publishing Co. are desirable. The *Comprehensive Bond. Value Tables* (1939) represents this company's most popular, and Acme *Table of Bond Values* (1923) its most complete, table.

'In the case of the Chicago Railway Company first mortgage 5 per cent bonds, which defaulted at their maturity on February 1, 1927, because of franchise difficulties, interest was paid upon presentation of the instrument, whereupon suitable endorsement was made upon the bond. When a bond has an unusually long maturity, such as the Northern Pacific Railway Company general lien 3's of 2047, only part of the coupons may be attached at the time of issuance in order that it may not be too bulky. When these have been used, additional coupon sheets are issued.

and address is recorded with the corporation, or more usually with a trust company acting for the corporation and serving as registrar of the issue. All interest payments are then made by checks mailed to the owner. Ownership can then be transferred only by the proper order of this person, whereupon proper record is made and the new owner's name is placed upon the bond. The method of transfer is very similar to that of the stock certificate.[10] Occasionally bonds are issued as "registered as to principal only," in which case coupons are attached for the interest payments, creating a hybrid form of instrument.

Usually the coupon and registered forms of bonds are interchangeable at the option of the holder, although a small fee of one or two dollars may be charged for the exchange. If this privilege does not exist, some difference in market price may develop between the two forms of the same bond issue as a result of temporary market preferences. Sometimes registered bonds do suffer slightly in market price upon the occasion of resale by an investor merely because of the slightly greater inconvenience of transfer, although it should be noted that the effort is no greater than for a stock certificate.

Since the name and address of the owner are on record with the corporation in the case of registered instruments, the holder can be readily notified of changes in the status of the bond, the most important being the intention to redeem. In the case of coupon bonds the corporation is obliged to announce its intention to call or redeem by advertising. This imposes the necessity for watching for the advertisements, which would be a considerable care for the ordinary coupon bondholder were it not the practice to pass this labor along to one's banker or investment house.

6. Serial number. The bond is described as "one of an issue." In order to distinguish this bond from its fellows, it is given a serial number as a mark of identification. The serial number on the illustrative bond in Figure 7 is ElVf-11732.[11] This number is recorded in transactions involving the bond and, should the bond be lost or stolen, may be used to trace the instrument. The coupons all bear the serial number of the bond to which they are attached.

7. Nature of security. A brief statement of the general nature of the security behind the bond is given in the bond instrument, but the full technical description is relegated to the trust agreement, a long and tedious document in modern corporation finance. This more complete statement of the contract between the bond-

[10] See pp. 75-79.

[11] In our illustrative bond the serial number is found on the back of the instrument and does not appear in Figure 7.

holders and the corporation may be obtained from the trustee of the issue. The work of the trustee and the customary forms of security are discussed below.

8. Special features. Despite the brevity with which the bond is drawn up, two features will ordinarily be described in it if they exist—namely, the redemption and conversion features. With regard to redemption, the bond should state when this privilege is permitted to the corporation and the prices at which it may be exercised. When a bond is convertible, the bond should state the name and amount of the security into which it may be converted and the times at which the bondholder may exercise his privilege.

9. Signatures. The instrument is usually signed not only by the proper officers of the corporation but also by the trustee." The purpose of this latter "authentication" by an outside trust company is to provide an additional check against improper issue or overissue.

Of the several points mentioned in this summary description of the bond instrument, two require further attention before proceeding to the actual financial plans of corporations: first, the security of the bond, and, second, methods of retirement.

Mortgage Bonds

Security for bonds. A bond may be secured by a claim, or lien, on certain of the properties of a corporation, or it may be unsecured and merely a general credit obligation. Real estate is the most usual security, although any form of property might become the subject of a lien. Most of the other forms of property used by the business corporation, however, are so briefly held, either wasting away or changing hands so frequently, as to make them relatively unsuitable as the security for a long-term loan." Personal, or movable, property, when it is pledged, is most often in the form of either stocks or bonds. In the case of railroads, thersilling_atock is often used as security roi¯a specialized f orni¯of ,instrument known as the *equipment trust certificate.*

When randTtogetlrer-with¯the¯bnilditigs and such improvements as are fixed to the land, has been pledged as the security, a mortgage bond issue is the result. From the legal angle, the subject of mortgages is very complex, but a relatively few basic considerations suffice at this point as a groundwork for the use of that in-

"In our illustrative bond the trustee's signature (Bankers Trust Co., New York) appears on the back of the bond.

" In Canadian practice, however, we find the "floating charge," which adds a general lien on assets not specifically pledged under the conventional real property lien. It might be defined as a blanket chattel mortgage on all assets other than those specifically mortgaged which have not been pledged to other creditors.

strument in finance. It should be clear as to what the mortgage is intended to do for the creditor and how the creditor exercises his rights under such a protecting lien.'[4]

The mortgage. Originally, the mortgage was true to its name—a "dead pledge." The instrument made a transfer of title of the property by the mortgagor, or owner of the property, to the mortgagee, who was his creditor. The mortgagor lost control of the property until the debt was paid. Since the debtor usually needed the property to provide for repayment, the equity courts subsequently ruled that the conveyance should be kept "dead" by a "defeasance," or defeating clause, as long as the obligations of the debtor were promptly performed. In case of default upon any of the payments the transfer became alive, and the unhappy debtor lost his property without further redress. The severity of this rule was later relaxed by the requirement that the property be offered for public sale and, in the event that a sale was made for an amount in excess of the debt, the surplus be turned over to the mortgagor. Under the varying laws of the several states, the debtor may also be allowed the privilege of redeeming his property within a certain period of time after the public sale. In some jurisdictions the law has come to recognize the changed status of the ancient mortgage so that it has ceased to be a conveyance of the property subject to defeasance. Here the mortgage is but a lien upon the property, with the right to have the property sold to satisfy the debt. (Often a "deed of trust" is employed rather than a "mortgage," but the distinction between the two instruments is of importance to the lawyer rather than the financier.) By whatever method the real estate is pledged for the benefit of the bondholders, the bonds so secured are referred to as "mortgage bonds," and the essential character of the situation is unchanged for the purpose of finance.

To sum up the character of the mortgage briefly, it may be described as an instrument pledging real property to secure a debt. The debt itself is represented by a note or, in the case of corporations, by a bond issue. Corporate mortgage bonds, then, are evidences of the promise of the corporation to pay interest and principal, secured by a lien on specifically named real property. In contrast to the mortgage given by an individual—say in the purchase of a home—the corporate mortgage is a long and complicated document.

[4] For an excellent description of the mortgage, see Wm. Lilly, *Individual and Corporation Mortgages* (New York: Doubleday Doran & Co., 1918), prepared especially for the layman under the direction of the Education Committee of the Investment Bankers Association. Individual and corporation mortgages are also described at some length in Hastings Lyon, *Corporations and Their Financing* (Boston: D. C. Heath and Co., 1938), pp. 244-286.

The process of seizing the property and holding the necessary sale is known as *foreclosure.* Since under the corporation mortgage a number of creditor bondholders exist, united action such as is necessary to enforce their position by foreclosure becomes a problem. In any case the mortgage could not conveniently be made out to the individual bondholders, who are constantly changing. Consequently the mortgage is given to a third party, the trustee, who acts on behalf of the bondholders. Some hold that the trustee should be the vigilant guardian of the bondholders' interests. In practice, he has been quite generally inert and slow to act, partly because of the costs involved in action, and partly because of the possible dangers of incurring some liability or becoming the object of vexatious, even though ineffective, lawsuits because of his activity. In order to obtain action it has ordinarily been necessary for a group of bondholders to unite and make suitable demand.[15] Indentures written under the Trust Indenture Act of 1939 must provide for more definite action on the part of the bond trustee.

The indenture. The relationships of the three parties—the debtor corporation, the trustee, and the bondholder—are defined in the instrument known as the *indenture,* or *trust agreement,* which we have referred to previously. (Even though no mortgage exists and the bonds are unsecured, a formal contract or agreement will be drawn up, the terms of which will run to a trustee for the benefit of the bondholders.) Here will be found the following:[16]

(a) The form of the bond and coupon instruments.
(b) The complete description of the property pledged.
(c) The authorized amount of the bond issue and, if this figure is more than the current issue, the conditions under which further bonds may be issued.
(d) The various protecting clauses, or "covenants," such as that the corporation shall repair and insure its property, pay taxes, and agree to suitable restrictions on further indebtedness.[17]
(e) Any provision for retirement by a sinking fund.
(f) Any call or redemption clause.

" The activities of bondholders' committees in connection with reorganization are described in Chapter 28. Generally the financial houses associated with the original distribution of the bonds will take appropriate steps to secure the proper united action of the scattered and ineffectual owners of the bonds.

"See C. W. Gerstenberg, *Materials of Corporation Finance* (New York: Prentice-Hall, Inc., 5th ed., 1924), for (a) corporate mortgage—Jones & Laughlin Steel Co., pp. 183-254; (b) trust agreement—the Mortgage Bond Co. of New York with United States Trust Co. of New YOrk, pp. 255-290; and (c) agreement securing short-term notes—pp. 291-298.

[17] may be elaborate in character and cover unusual contingencies such as riot, tornado, embezzlement, forgery, and losses from business interruption. The latter would cover expenses that go on during idleness due to one of these contingencies, such as fire or flood, and would care for such expenses as taxes, salaries, and interest on borrowed money.

(g) An "acceleration" clause, which makes the principal of the bond due and payable at once if a default in the interest payments occurs.

(h) Any privileges of the bondholder, such as the right to convert into other securities, carefully described at length.

(i) Definition of the status and duties of the trustee. The chief duties of the trustee are to authenticate the bonds, represent the bondholders in the event of default, handle any sinking fund, and collect and distribute interest and principal payments.

The need for more complete disclosure to security holders of the essential provisions of bond indentures and for responsible and disinterested trustees led to the Trust Indenture Act of 1939. This act requires that corporations must file trust indentures with the Securities and Exchange Commission as a part of their registered statements. Likewise corporations offering an exchange of new securities for old, whether as a voluntary readjustment or as a reorganization of their capital structure, must file copies of indentures that will qualify under the terms of the law. In addition to securities exempted from registration under the Securities Act, these indenture requirements do not apply to obligations of foreign governments or to corporation bond issues whose total principal amount is limited to $1,000,000 under the given indenture.

To be qualified, the indentures must contain certain provisions covering the functions and responsibilities of corporate trustees, including the following (subject to minor exceptions) : (a) one of the trustees must be a corporation with capital and surplus of not less than $150,000; (b) in case of a conflict of interest, such as would exist when the trustee is acting under another indenture of the same debtor, or where the trustee or its officers are affiliated with the issuer, or where one owns securities of the other, the trustee must either resign, eliminate the conflicting interest, or allow security holders to'exercise their defined powers of removal; (c) the trustee must furnish the bondholders with periodical and special reports covering his status as trustee, the condition of the property held in trust, and other matters; (d) the trustee must notify the bondholders of all defaults within 90 days; (e) prior to default, the trustee is not liable except for the specific duties set forth on the indenture, but after default he must exercise his defined powers with the same degree of care and skill "as a prudent man would exercise or use under the circumstances in the conduct of his own affairs."

The additional work and responsibility for the trustee and the increased expense for the issuer in administering the trust will add to the cost of financing. The corporation will be obliged to furnish lists of bondholders to the trustee at stated intervals and to make

these lists available to the bondholders. It must also supply annual and special reports. Copies of all reports must be filed with the Commission and with any exchanges on which the securities are listed.

"Rescue" or "distress" loans in time of financial trouble will be discouraged by a provision that, if the trustee becomes an individual creditor of the corporation within four months prior to a default or after a default, it must set aside and share with the bondholders any payments (with certain exceptions) received on its own loan. Moreover, information about such loans must be included in reports to the bondholders.

Types of liens. The importance of the description of the lien is that it sets apart the property upon which the bondholders have a prior claim in the event of financial trouble. Should this property not yield the amount of the secured indebtedness in the foreclosure sale, the bonds are an unsecured general credit obligation for the unpaid balance. For this balance they will share with the other general creditors in whatever other property, if any, may exist. Should the pledged property bring more than the amount of the debt which it secures, the surplus is applied *pro rata* to the claims of the unsecured creditors. After all debts have been fully met, any surplus belongs to the stockholders.

A corporation may have a number of secured bond issues, and these may have co-equal first mortgages on different properties, or successive ranking claims, as first, second, and third mortgages, on a single property. In the former case each set of bondholders would look first to their specific property for satisfaction in the event of trouble. As a practical matter, the individual properties might not be actually sold but some plan might be evolved for adjusting claims and carrying on.[18] In such a new arrangement the positions of the various old bondholders would depend upon the priority of their liens and the relative profitableness and strategic importance of the properties pledged.

When the liens succeed one another, with the same property as security for all, payment is made to each set of creditors in the order of their priority. Thus, if a first, a second, and a third mortgage—each with a claim for 100,000—existed, and the property realized $150,000 at the foreclosure sale, the first lien would be paid one hundred cents on the dollar, the second 50 per cent of its claim, and the third nothing. Any unpaid interest would be ranked with the principal as a part of the claim secured by a given mortgage.

In the case of successive liens such as the foregoing, the interest payments on one or more of the prior liens may be continued while

[18] See Chapter 28, "Reorganization of Corporations."

default occurs on the later-ranking liens. In such an event, foreclosure takes place only with respect to the secondary liens in default, and the purchasers of the property at the foreclosure sale buy it subject to the prior liens, which are said to be "undisturbed." By maintaining the prior debt, which may have been created under favorable conditions and at low rates of interest, a larger sum may be realized for the holders of the secondary issues. Thus in the preceding illustration, if interest had been continued on the first mortgage, the holders of the second mortgage might have been able to sell the property, subject to the $100,000 first mortgage, for $160,000, the buyer paying $60,000 cash, which would have been $10,000 more than the $50,000 realized according to the first supposition. The claim of the third mortgage and the owner would still be completely wiped out under this method of foreclosure and sale.

A complex system of liens such as this discussion suggests is not the general rule, save in the field of railroad finance.[19] Where .a number of liens do exist, those with a prior claim are termed *senior,* or *underlying,* and the secondary claims are called *junior* or *overlying.* The adjective *underlying* describes the closeness of lien to the land. In railroad finance underlying bonds are sometimes said to be "next to the rails."

Open-end mortgages. The creation of numerous liens may be expensive to the corporation for two reasons: first, a number of small issues will not enjoy the same marketability as a single large issue equal to their sum, a condition which will tend to decrease the attractiveness and increase the interest cost of the former over the latter; and second, the later issues, being junior liens, may have to pay so much higher an interest rate as to raise the total cost of the borrowing above that required for a single large first mortgage issue. When, however, each mortgage is "closed," so that no further bonds may be created under that lien, a multiplicity of issues becomes inevitable for a growing business requiring borrowed capital for its expansion.

In order to overcome the difficulty created by such a situation, the open-end mortgage has been created. The device, as its name implies, permits successive issues, all secured by a single lien. Bearing a common name, these issues are distinguished as Series A bonds, Series B bonds, and so forth.[20] The various series will

[19] Similar complexity does exist in other fields, such as public utility finance, as a result of intercorporate relations, a subject which is discussed in Chapter 25, "Holding Companies."

[20] The word *series* in the title of a bond is the usual indication of an open-end issue. The frequency of its use by large corporations may be gleaned from a reading of an index of issues such as that in Moody's annual *Manuals of Investments.* See footnote 21.

be issued at different times and may be unlike as to interest rates and maturities. The open-end mortgage is particularly appropriate for the railroad or public utility, which regularly employs large sums of borrowed capital as it grows.

This privilege of increasing debt might result in the dilution of the security, so as to weaken greatly the original strength of the bond. Certain restrictions are usual in order to place a limit upon such potential weakness. The two most important and common provisions relate to the proportions which property and earnings shall bear to the bonds and interest charges, respectively. A very usual provision in present-day public utility indentures permits the issuance of additional bonds for not more than 75 per cent of the cost of future unencumbered property additions or for the refunding of existing issues with equal or prior liens.[21] Earnings are ordinarily required to be equal to at least twice the interest charges on existing and proposed bonds. The 75 per cent limitation would appear rather generous were it fully utilized at every opportunity. Thus, if a property worth $10,000,000 were acquired and 75 per cent, or $7,500,000, in bonds were issued, then 6 per cent charges on these bonds would amount to $450,000. If earning power upon the whole property were but 7 per cent, or $700,000, a not unusual figure for a regulated public utility, then the charges would be earned only 1.58. times, or considerably less than the suggested standard of two times. The presence of the earnings limitation clause would act as a check upon the more generous property limitation clause in such a case. In a period of low interest rates

[21] A sample of almost any, large-scale public utility financing where the open-end is found, as it usually is, reveals the commonness of the 75 per cent limitation. Reference may be made to such mortgages as those of the Pennsylvania Power & Light Co. first mortgage gold bonds, Commonwealth Edison Co. first mortgage gold bonds, and Portland General Electric Co. first and refunding mortgage bonds.

A study of 342 open-end mortgage issues, amounting to $45,000,000' or more of operating utilities, as reported in *Moody's. Manual, Public Utilities,* 1937, revealed 281 issues with both restrictions, as shown in the following table. Neither restriction was reported for 31 companies; 16 contained a property restriction only; 11 had a property restriction which varied with the earnings coverage achieved; and 3 had an earnings restriction only.

Property Restriction		*Earnings Restriction*	
Maximum Per Cent of Property	*Number of Companies*	*Minimum Times Interest Earned*	*Number of Companies*
50	4	11	13
60	16	14	88
65	2	2	156
664	14	24	1
70	30	24	12
75	189	3	8
80	25	34	1
85	1	4	2
	281		281

the property restriction might prove more severe than the earnings restriction.

Instead of restricting interest charges to one half of earnings, the clause might provide that "additional bonds may be authenticated (other than for the refunding of bonds previously authenticated) . . . provided net earnings, as defined in the mortgage, for twelve consecutive months out of the preceding fifteen months shall have been at least equal to either twice the annual interest requirements on, *or 12 per cent of the principal amount of,* all bonds outstanding under the mortgage, including the proposed issue." The latter alternative means that, in case of an unusual situation in which earnings were 12 per cent *but not twice the interest charges,* the corporation could utilize this option and thus obtain greater freedom. In order to be of any value to the corporation, the cost of borrowing would have to be more than one half of 12 per cent, or over 6 per cent.

In the interests of conservatism, which would protect both the bond buyer and the corporation's own safety, it would appear preferable that the corporation be restricted in its borrowing to the more stringent of the two alternatives rather than the less. An illustration will reveal the reason. Assume that a $100,000,000 corporation had optimistically issued $75,000,000 in bonds at the low interest rate of 3 per cent, thereby permitting its $7,000,000 income to cover the charges of $2,250,000 much more than twice over. The net earnings of $7,000,000 are only 9.33 per cent upon this funded debt of $75,000,000. Should these bonds mature in a period of high interest rates, and as much as 6 per cent, or $4,500,000, have to be paid on the new refunding bonds, then the lowered margin of safety would result in impaired credit standing—the charges being earned only 1.56 times—and the refinancing might be rendered extremely difficult, if not impossible. Should a year of subnormal earnings coincide with these high interest rates, which is not an unusual condition, the refinancing might fail and the corporation might become insolvent.

The two restrictions upon bond issues of the open-end type with respect to property and earnings are of first-rate importance. Other restrictions are sometimes included. The total authorized amount may be a certain sum rather than unlimited. Such a "limited open-end" issue hardly gives much in the way of increased protection if the other restrictions are adequate and may seriously hamper the growth of the corporation if it expands beyond the imagination of the management as represented by the authorized limit.[22]

[22] In 1931 Pacific Gas & Electric Co. increased the authorized upper limit on its first and refunding bonds from $250,000,000 to $500,000,000. That this

Again, the amount of the issue might be restricted with relation to the outstanding stock, on the theory that the stock represents the property contribution of the owners, which serves as the margin of protection. A typical provision of this sort employed by railroads is that bonds shall not exceed three times the capital stock outstanding, which would roughly approximate the "75 per cent of property" restriction.[23] The latter property clause, already referred to, is a more direct and satisfactory measure of this factor. Since the amount of stock is usually stated at par in such a clause, it is a very unsatisfactory measure of stockholders' investment.[24] Furthermore, the funds obtained by the sale of stock might be invested in undesirable assets, such as the speculative stocks of other railroad companies, which would be a most unsatisfactory basis for issuing bonds.

After-acquired clause: removal. Quite logically, if a corporation is permitted to expand its debt under an open-end mortgage, any subsequently acquired property should be added to the original security. Such an absorption of later property is effected by an "after-acquired clause." This provision might appear even in a closed mortgage. After incurring a debt, an industrial concern might erect, with the aid of surplus earnings, new plants which were better located and more efficient than the old. An after-acquired clause would prevent an impairment in the safety of a bond issue of this sort.

Such an all-enveloping lien, if balanced by an open-end feature, should not be bothersome to the corporation under any ordinary circumstances. If the open-end privilege were limited, however, and that limit were reached, then the corporation would be faced with a lien which would engulf all new property but offer no means of financing it. If borrowing becomes sufficiently desirable, the obstacle of the after-acquired clause must be removed or else surmounted by indirection, provided that a junior lien is impractical. Considering first the methods of removal, we find that three are possible:

1. The simplest and most common method is the redemption, if it is assumed that the issue is callable, of the bond issue which is acting as an impediment. The necessary funds to effect the redemption are provided by the proceeds of the large new issue. While this course involves some trouble and expense, it may actually

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increase was desirable is indicated by the fact that by 1935 the total outstanding amounted to $234,000,000, although its debt was not regarded as excessive nor its growth ended.

23 This restriction is found in the New York Central & Hudson River Railroad Co. refunding and improvement 4t's of 2013.

24 The reasons why par value is an unsatisfactory measure of the stockholders' investment were stated on p. 87.

be profitable. If the company has grown and prospered—as new financing would tend to imply—its credit may have improved to the point where the new borrowing will cost less than that being retired, to say nothing of the greater attractiveness of a larger issue to investors who are interested in marketability.

2. A method of considerably greater difficulty, because it would involve obtaining the consent of the individual bondholders, would be the exchange of the old bonds for those of the new issue. Unless the corporation were willing to offer some tangible consideration, such as increased interest or cash bonus, exchanges would probably be slow, even though the new bond had intrinsic advantages, such as greater marketability, which would make it slightly better than the old. Mere inertia and indifference would prevent some bonds from being exchanged. The trouble involved in obtaining exchanges from many scattered bondholders is considerable in any case.

If all but an insignificant portion of the offending bonds were exchanged, these few might not interfere with the substantial success of the proposed new issue. The indenture of the new issue could provide that no other bonds of the old issue should ever be sold thereafter—in other words, "closing" it. A sufficient amount of the new bonds might be reserved to be sold to pay off the unexchanged bonds when they came due. And, finally, the old exchanged bonds might, if their indenture did not require cancellation, be deposited as collateral security for the new issue. In case of any subsequent default upon bonds so secured, the collateral would be seized and would, to an extent limited only by their amount, give ranking equal to that of the unexchanged bonds.

3. The last method and the least likely of use would be to obtain the consent of the old bondholders to a modification of their indenture, so as to permit the additional issue. [25] Because the consent of individual bondholders is required, this method is open to all the objections of the preceding one, plus the fact that the consent may have to be unanimous unless a specific provision permits modification by some very large majority.

In order to indicate his consent, a bondholder would have to submit his certificate to the corporation for proper endorsement, which

[25] Even the modern tendency of preparing for all eventualities does not ordinarily provide for concessions likely to weaken the position of the bonds. Thus, the New York State Electric & Gas Corporation first mortgage gold bonds indenture was amended at the time of issuance of the 4t per cent series due 1980 to permit subsequent modification if all prior series should be retired and 85 per cent of the principal amount of the outstanding bonds should consent. However, no such modification would permit the extension of the time of payment of the principal or the interest, or a reduction in the rate of interest, or the creation by the company of any mortgage lien ranking prior to or on a parity with the lien of the mortgage of the issue in question.

is stamped upon the bond.. Bonds whose holders have consented to some modification of their original contract with the corporation in this or some other matter are commonly called "stamped" bonds.[26]

After-acquired clause: avoiding by indirection. These three solutions represent a direct frontal attack upon the problem created by an after-acquired clause in a bond issue which either permits no bonds to be sold or else so small an amount as to be unsatisfactory. Other solutions are possible through indirection. They are generally simpler than the last two alternatives and will appeal to the management whenever they are cheaper than the solution of redeeming the old bonds. This second group of solutions consists of the use of the purchase money mortgage, financing through a subsidiary, financing after a consolidation which wipes out the identity of the old company, and the lease.

1. *Purchase money mortgage.* This mortgage, as its name implies, is given to the vendor as a part of the purchase price of the property which the mortgagor acquires. (If the mortgage is large enough, it could be made the security for a purchase money mortgage bond issue, which the vendor could sell to realize cash.) Such a vendor's lien precedes the claim which any of the purchaser's bonds might have because of an after-acquired clause. Since the old bondholders have as much security as before, plus a claim on any excess value which the new property may have over and above the purchase money mortgage, they are not ordinarily injured but bettered. Occasionally unprofitable additions might impose a debt burden which would impair the general credit strength of the corporation. This hazard is so small that many strictly drawn indentures forbidding other funded debt specifically permit purchase money mortgages.[27]

Since the purchase money mortgage is one variety of "piecemeal" financing,- the question arises as to the reason for its use. Even though a closed mortgage did not make the device necessary, the small size of the transaction might make the creation of additional bonds of a large general issue very cumbersome. Or the property

" For example, 33i per cent of the notes of each maturity of the Chicago and Western Indiana Railroad equipMent gold 6's due 1920-1935 were stamped as subordinate in lien through a supplemental agreement.

27 Purchase money mortgages might, however, by being issued for a larger proportion of the value of the acquired property than the indenture of the major bond issue would permit for bonds of that issue, reduce the ratio of security to bonded debt. To prevent this possibility, the indenture of the Interstate Power Co. (Delaware) first mortgage gold bonds requires that, where properties subject to prior liens are acquired by the company or a subsidiary, an equal amount of bonds must be withheld out of the amount otherwise issuable under the open-end provision until such prior liens are provided for. Furthermore, the total principal amount of such prior liens may not exceed 25 per cent of the principal of outstanding first mortgage bonds.

being acquired might have special appeal as security, making possible a lower interest rate on funds borrowed to acquire it. For example, an industrial corporation engaged in a hazardous industry might use the purchase money mortgage to advantage in buying a well-located office building.

2. *Financing through subsidiaries.* A corporation may create a second corporation, the stock of which it purchases. When not forbidden by the indenture, it could sell the bonds of this subsidiary company to the public to finance either the construction or the purchase of the desired company. Again there is the objection of piecemeal financing, although in some instances the project—especially when large enough to warrant the formation of a subsidiary corporation—may be sizable enough. Very often property so segregated in the hands of a separate corporation has certain advantages as security for a bond issue, as in the case of an office building for an automobile manufacturer or an important terminal building for a railroad. In such a case as the latter, an independent corporation would offer a convenient method of sharing the responsibility for a terminal among a number of railroads. Several roads would own stock in the terminal-owning corporation in proportion to their respective interests in the enterprise.

3. *Consolidation.* A third possibility is that the corporation might sell out its properties to another. The stockholders in the old corporation would receive shares in the new one, which would then acquire the various properties subject to any existing debts, secured or otherwise. The new corporation is said to assume the debts of the old. However, it is not bound to submit all of its subsequent property additions to the effect of the former company's after-acquired clause, and so it could plan its future financing without restrictions.[28] A stumbling block might exist, however, in the form of restrictions which would either require the bondholders' consent to the sale of properties, an unusual provision, or require the corporation to bind any successor to the restrictions of the indenture.

Whenever the open-end is wise policy, the unlimited form is most likely to serve the interests of both the corporation and the investor best. The corporation is assured of simplicity and economy in its

[28] Fletcher writes: "The cases sustaining and extending after-acquired clauses in .corporate mortgages and deeds of trust, do 'not go to the extent of holding that, under the usual after-acquired property provision, the, lien of such a mortgage or deed of trust, on consolidation of a mortgagor corporation with another, spreads to the property contributed by the other constituent.' . . . It follows, therefore, that the usual effect of a sale of railroad company's property, covered by a mortgage having an after-acquired property clause, is to terminate the operation of such clause." W. M. Fletcher, *Cyclopedia of the Law of Private Corporations* (Chicago: Callaghan and Company, revised and permanent edition, 1931), Vol. 7, Sec. 3110, p. 253.

capital structure, and the investor is assured of the greater security which usually goes with a lien of greater coverage. It is assumed that with an unlimited open-end the benefits of the after-acquired clause will be granted as a matter of course. Pursuing the argument to its reasonable conclusion, we may say that the well-drawn indenture should provide that any successor corporation might also issue bonds subject to the ordinary restrictions.[29]

Although avoidance of the after-acquired clause by consolidation would appear an evasion of the spirit of the original indenture, it would be well to remember that the amount of property pledged remains undiminished, even though its title is now vested in a new company. This company might, it is true, with its greater freedom

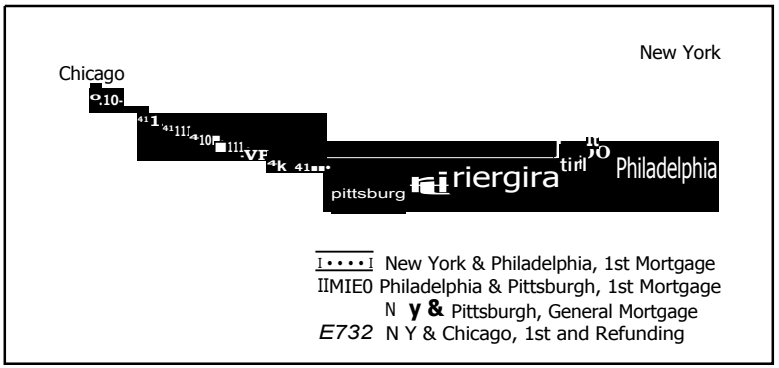

Figure 8. Mortgage Map.

to incur debt, do so on a scale that would reduce the standing of the old bonds.

4. *Lease.* Instead of purchasing the desired property, a corporation might rent it for a period of years under a lease contract. By this arrangement the need for financing might be eliminated, since the property is already in existence and operating—as is ordinarily the case where the lease is used. The lessor, if it leases its entire property, ceases to be- an operating company and merely collects rentals, which it distributes among its security holders.

An unusual application of the lease idea is very commonly employed in financing railroad equipment. Since rolling stock is per-

" The working of such a clause may be studied in the history of the Commonwealth Edison Co., which serves the city of Chicago. The Commonwealth Electric Co., in an indenture created in 1898, used both the open-end and the after-acquired clause, the former with no limit upon the total authorization. Any successor corporation by consolidation was permitted to issue bonds if it observed the original restrictions. In 1907 the Commonwealth Edison was formed by a consolidation, with the Chicago Edison Company, and the privilege was used until in 1931 the total had grown to $165,000,000, as compared with but $8,000,000 of issues by the Commonwealth Electric Co.

sonal property rather than real property, which is the ordinary object of a mortgage lien such as this chapter has considered, the discussion of equipment securities is deferred to the next chapter.

Mortgage bond titles.[30] Certain other bond titles are very frequently used for mortgage bond issues. These may be described to advantage in connection with Figure 8, which shows the property of a hypothetical railroad with a system of bonds which is the outgrowth of piecemeal financing. The map shows two separate underlying divisional liens on the property, one between New York and Philadelphia and one between Philadelphia and Pittsburgh. Such senior issues upon parts of the property would be expected when the two parts of the road are separately constructed and then consolidated at a later date. Because of their priority over later mortgages, they are senior and underlying. The "underlying" character is appropriately preserved in such a pictorial chart, where the liens are ranked from the bottom to the top.[31] Because these first mortgage bonds are on divisions of the whole, they are also called *divisional liens.* Bonds so named are expected to have a first mortgage claim.

Later, after these two original companies were merged, improvements might well have been financed by such a mortgage issue as the New York and Pittsburgh general mortgage bonds.[32] Instead of "general mortgage," these bonds might have been called "second mortgage," "consolidated," "consolidated and improvement," or "first consolidated," for reasons that are obvious from the context. Note that the word *first,* as in the title "first consolidated," does not necessarily mean a first mortgage, although a hasty reader might gain that impression.

Titles—for example, "improvement"—may refer to the purpose of the issue in such a vague manner as to be without any real descriptive value. Where, as in the case of the title "terminal,"

" While mentioning that real property is ordinarily meant when a "mortgage" bond is spoken of, it might be well to add that the term *real estate mortgage bond* or *real estate bond* is generally confined in the financial vernacular to bonds secured by real estate used for residential, office, and sometimes store purposes. The adjectives *industrial, railroad,* or *public utility* are employed when the realty is used for manufacturing, railroading, or any of the several utility services, respectively.

"This scheme of pictorial representation of liens is utilized in White and Kemble, *Atlas and Digest of Railroad Mortgages* (New York: White and Kemble).

"The general mortgage bonds of the Central New York Power Corporation illustrate the nature of this type of obligation. The company was formed in 1937 to consolidate 12 companies operating in central and northern New York State. The first issue under the indenture consisted of $48,364,000 of 32's due in 1962. $36,364,500 of bonds of the former companies were redeemed from the proceeds, leaving the issue subject to $13,421,500 principal amount of underlying liens.

the nature and purpose of the issue are clear, the title may be useful. Since a railroad may not change its terminal easily in a large city, such property is likely to be valuable security, especially if it could be profitably turned to other uses as city real estate in case of seizure and foreclosure.

Returning to the illustrative mortgage map in Figure 8, we see that the railroad has extended its line westward from Pittsburgh to Chicago. If this construction were carried out by the same company, it might create for the purpose a new bond issue—an especially simple and probable procedure if the general mortgage were closed. This fourth bond issue could be made a first mortgage on the new road and a third mortgage on the existing lines. Although such an issue would be technically a "first and third" mortgage, a much more likely title would be "first extension 'mortgage" or "first and general mortgage." By this time the corporation might have decided upon an open-end issue that could care for later improvements and also simplify the structure by refunding the older bonds as they came due.[33] Such an issue could be called "refunding and improvement." Or, if the magic word "first" were desired in the title, then "first and refunding" could be used, as shown in the figure." The bonds would be a first lien upon the new lines and would be used for refunding as the old bonds matured or were called. As prior liens are paid off, this junior claim moves up and takes their position.[35] Thus both the New York and Pittsburgh general mortgage bonds and the New York and Chicago first and refunding bonds would improve their position with the retirement of the divisional liens. Were the refunding to occur at once by calling all underlying mortgage bonds and paying them off from the proceeds of the newest issue, the word "refunding" would be gratuitous, and that most pleasant sounding title, "first mortgage," could be used immediately.

An example of such a situation is found in the Washington Gas Light Company refunding mortgage gold bonds, 5 per cent series due 1958, which were issued in 1933. The description states that, after the payment of certain other bonds from the proceeds of this issue, it will be secured by a direct mortgage on all of the company's fixed property and on substantially all outstanding stocks and bonds (except $1,000,000) of subsidiaries, subject to the liens securing $5,199,500 general (now closed first) mortgage bonds due 1960 and $1,500,000 6 per cent mortgage bonds (closed) due 1936. The refunding mortgage will permit the issuance of bonds to refund the underlying bonds maturing in 1936 and 1960.

The titles of the Consolidation Coal Company's refunding sinking fund gold 4i's of 1934' and its first and refunding mortgage sinkino- fund gold 5's of 1950 are of interest in this connection. The former is actually a first mortgage on certain properties; the latter, while also first on some property, is second on those other properties given to secure the refundin' 44's.

"The Central Railroad of New Jersey general 4's and 5's of 1987 and the St. Paul Gas Light Co. general mortgage gold 5's of 1944 are examples of junior liens becoming first liens through the retirement of senior issues.

The word "refunding" in a bond title suggests future improvements in investment standing through that process. Lest this hope prove illusory, a bond indenture should require that the underlying bond issues be retired upon their maturity and not extended. Dewing cites the huge refunding and improvement mortgage of the New York Central (dated October 1, 1913, and due 2013) as an example of failure to observe this principle. [36] Although by name a refunding issue, the underlying bonds may be extended, at the option of the company, until one month before the maturity of the issue in September, 2013. The right to extend is sometimes desirable, because, in an emergency such as the railroads faced in the 1930's, it may be easy to get bondholders to extend a prime underlying mortgage bond at maturity but difficult to raise the money to pay them off by selling available junior security issues of weak standing. Extension may be, however, not a matter of necessity but merely a means of saving a small amount of interest by keeping an old mortgage alive. [37] A corporation desirous of maintaining its general repute and credit will avoid misleading the investor by an evasion of the spirit of the indenture, and properly drawn indentures will minimize the opportunities for lapses in corporate morality.

The admonition of the Investment Bankers Association Committee to members indicates why reference should always be made to an exact description of the lien and why reliance should not be placed solely upon the bond title: [38]

> One of the earliest matters considered by the Association in connection with circular practice is that of bond titles, as it appeared that exactness was not always observed in this respect. The term 'first mortgage' was more or less abused, and such terms as `refunding,' consolidated,' etc., were used more or less indiscriminately without much regard to their technical meaning. Also, bonds of holding companies were put out with titles which tended to give the impression that they were secured on property rather than on stock and bond collateral. Attention having been called to this point and discussion having taken place, it is probably fair to say that

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" A. S. Dewing, *Financial Policy of Corporations* (New York: Ronald Press Co. rev. ed., 1926), p. 125.

"The Atlantic City Railroad Company first extended gold 5's of 1954 and the Philadelphia and Reading Railroad prior lien gold 41's of 1943 provide examples of extension for this purpose. The latter issue originally matured in 1893 and was extended to 1933 and then re-extended to October 1, 1943. In 1933 the interest was reduced from 5 per cent to 4i per cent, and holders were given the option of having their bonds purchased at par and accrued interest by the railroad or a subsidiary. Any purchased bonds were also extended.

¨ Report of a Special Committee on Bond Circulars to the Board of Governors of the Investment Bankers Association of America, *The Preparation and Use of Bond Circulars,* pp. 3-4.

The description of the lien of the Seaboard Air Line first mortgage 4's of 1950 indicates that it is a first mortgage on 243 miles of road, a second mortgage on 1,656 miles, and a third mortgage on 543 miles.

practice in this matter has improved, and work is still going on among members of the Association which cannot fail to be useful for the future. In this matter, two things need to be considered. One is the legal meaning of the description used in the title, and the other is the impression which will be made on investors. It is extremely useful in all this consideration of circulars and circular material to keep the point of view of the average and somewhat uninstructed investor in mind. Anything which gives him a wrong impression should be avoided."

CHAPTER 7

CORPORATION BONDS *(Continued)*

TURNING to that class of bonds which are secured by personal property, we find two chief subclasses—the collateral trust bond and the equipment trust obligation. (The latter is not a true "bond" but is a credit instrument by legal indirection, as will be pointed out shortly.) On rare occasions other forms of personalty are pledged as security.[1] Obligations secured by collateral and by equipment are much less used and less important than those secured by realty. Nevertheless a description of their character is essential for an understanding of both the complexities of financial practice and the principles they suggest.

Collateral Trust Bonds

General nature. Collateral trust bonds are secured by the debtor corporation's deposit of either stocks or bonds or both, with a trustee. In the event of any default upon the bonds so secured, the pledged collateral can be seized and sold. As in the case of mortgage bonds secured by real property, any excess received upon the occasion of the sale goes back to the corporation to pay other creditors, while any deficiency becomes a general unsecured claim. As stated before, the term *mortgage bond* is employed here in the usual sense to mean a bond secured by real property. Collateral for a collateral trust bond may be pledged, however, by the use of a mortgage instrument, which would be known at law as a *chattel mortgage."*

Although individual collateral trust issues may enjoy premier investment rank, their general investment repute as a class falls below that of mortgage bonds. This lower standing is attributable

[1] In the latter class would be the Copper Export Association three-year secured notes, issued in 1920, for which warehoused copper metal was pledged as security. Even this case could hardly be regarded as more than an exceptionally long-term bank loan, designed to enable the copper producers to finance the carrying of disastrously heavy inventories. Characteristically, inventory is more suitable security for a bank loan than for a bond issue. By pooling this load of excessive copper inventories and preventing its being dumped on the domestic market, price demoralization was prevented. At the same time the proceeds of the loan strengthened the financial positions of the association members. Since the agreement was to sell the deposited copper for export trade only, the association was exempted under the Webb-Pomerene Act from antitrust law restrictions.

to the fact that stocks are ordinarily used as collateral security. Although such security will vary in quality with the amount and investment standing of the stock deposited, it is ordinarily of second grade because the stocks themselves are generally junior to the claims of the bonds of their respective companies.

The situation may be illustrated by taking a hypothetical case in which the apparent paradox of a collateral trust bond with security three times its claim is shown to be less secure than a first mortgage, or even an unsecured, bond supported by property worth but twice its claim. Suppose three corporations, *A, B,* and *C,* each with property worth $100,000, have bond issues outstanding for

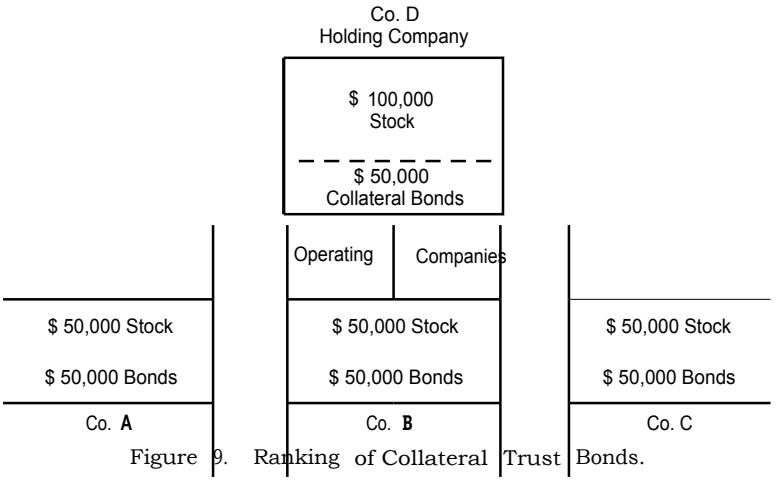

Figure 9. Ranking of Collateral Trust Bonds.

$50,000 apiece, as shown in Figure 9. The $50,000 of stock of each company is owned by Company D, which pledges all of it for a $50,000 collateral trust bond issue. The stocks used as collateral are worth three times the amount of the debt they secure, but in case of trouble the first mortgages on each property would have to be satisfied before any distribution could be made to the stockholders of the respective companies. The sole property •of the holding company, D, the issuer of the collateral trust bonds, consists of this stock. Consequently the fate of *D's* bonds rests upon the fortunes of the deposited stocks. If the property of this system is regarded as a unit, the several claims would rank in this order: (1) the mortgage bonds of the three companies, *A, B,* and *C,* (2) the collateral trust bonds of Company D, and (3) the stock of Company D, which would be held by the public. If the mortgage bonds themselves had been pledged instead of the stocks, or if the three operating companies had had no bonds outstanding,

then the collateral trust bonds would have enjoyed first rank. [2]

A possible advantage of the collateral trust bonds as compared with the mortgage bonds in this illustration would lie in the greater diversity of the property securing the former than that securing any one of the latter. Two of the operating companies might even fail so badly that their bondholders would suffer losses, while the third could be so successful that its stock would be sufficiently valuable to pay the collateral trust bonds in full. This diversification factor and its influence upon safety should be kept in mind in any analysis of a collateral trust issue. In most instances, however, the several operating companies are so much alike that circumstances which cause the failure of one, such as a business depression or the weakness of a particular line of industry, are likely to undermine all at the same time.

Kinds of collateral trust bonds. The qualities of collateral trust bonds, as well as the reasons for their issuance and their customary protective restrictions for the benefit of the bondholder, are best discussed in connection with the various types of issue, rather than in the abstract fashion of the preceding section. A roughly satisfactory classification may be made on the basis of the kind of collateral employed, as follows:

1. Bond collateral.
   - (a) A variety of small issues of subsidiary corporations which are controlled by the corporation selling the collateral trust bonds.
   - (b) Mortgage bonds of the issuing corporation.
   - (c) Investment issues of unrelated corporations.

2. Stock collateral.
   - (a) Stocks of allied or subsidiary corporations which are held for control.
     - (1) Where the debtor is a holding company rather than an operating company and the stock collateral is the only security that it could offer.
     - (2) Where the debtor is an operating company and the stock to be used as collateral has been purchased as a step in the direction of control and possibly merger. Or the pur-

[2] The possibility of high credit standing is illustrated by the rating accorded to the debenture bonds, and formerly to the collateral trust bonds, of the AmeriCan Telephone and Telegraph Company, which is primarily a holding company, like Company *D*. On the other hand, the possible weakness of such holding company issues was spectacularly illustrated in the crash of the Insull empire, in which the bonds of Insull Utility Investments, Incorporated, the topmost holding company, lost virtually all value.

chase may represent a desire to make the company an ally and create favorable working relationships

(3) Where the debtor is an operating company and a subsidiary has been established for some special purpose, so that the stock collateral is coupled with a mortgage lien on the other operating property.

(b) Stocks of unrelated companies which are held for investment.

1 (a). *Repackaging of small mortgage liens.* The origin of the collateral trust bond has been attributed to the need of railroads to convert the small and relatively unmerchantable liens of branch lines into a single large bond issui.[3] In tie piraseo ~~the~~ sales departMeff, Tfie goodsrequired repackaging ordert WY market demand. The construction` of the Uniza Paeific Railroad had been subsidized by the Unite States Government, which took a second lien upon all the company's property. In 1873, in order, to prevent impairment of this lien, Congress passed a law prohibiting the Union Pacific "from increasing the bonded debt of the property subject to this lien." As a result, the financing of extremely necessary extensions and branches by mortgage bonds with a general lien was made impossible. Hence subsidiary companies were formed to do this building. Funds were advanced by the Union Pacific from the current earnings and the sale of capital stock to finance these subsidiaries initially, and 7 per cent first mortgage bonds were accepted in return. In 1879, in order to reimburse the treasury for these expenditures, 6 per cent collateral trust bonds were sold to the extent of about $7,000,000, providing the first example of this type of financing. Another like issue was sold three years later.

The collateral trust device in this form has proved useful to both railroads and public utilities. The interposing of a subsidiary corporation between the new property and the major company even has certain advantages over the more direct method of finance. Because the new property is held by a separate legal entity, its failure will not necessarily involve the parent company, since loss may be limited to the original investment. If it becomes desirable to sell a subsidiary, the parent company can usually obtain the release of the securities of the subsidiary held by the trustee for the collateral trust bondholders by putting up a suitable amount of cash or new collateral and so effect a sale. Sometimes a special

[3] T. W. Mitchell, "The Collateral Trust Mortgage in Railway Finance," *Quarterly Journal of Economics,* 20: 443-467 (1906).

or individual company is required by regulatory laws, as in Texas, where steam railroad operations must be conducted by a Texas corporation. Peculiar privileges may be enjoyed by a subsidiary company; for example, the Rock Island built the road of the Wisconsin, Minnesota and Pacific under an old corporate charter which exempted stockholders from the usual liabilities imposed by the states through which its lines passed.[4]

From the standpoint of the bondholder, the chief problem is the likely value of his lien in the event of trouble. If the mortgaged properties have been profitable and capable of independent operation, as might be the case with independent public utility properties, the position of the collateral trust bonds would be excellent.' In fact, if the property behind the collateral continues to pay its way, the collateral will produce the necessary flow of interest income to pay the interest upon the collateral trust bonds, and the latter would not need to default. If, however, the properties behind the collateral are mere appendages of a major system, as in the case of branch lines of a railroad, separate operation might be impractical. In the maneuvers of reorganizing a failed business, a collateral trust issue secured by a lien on such secondary property would tend to fare worse than senior obligations secured by mainline property but probably better than unsecured obligations.

Protective provisions will vary with the situation but will be framed toward the end of maintaining the original quality of the security. Collateral of this type should be first mortgage, have a total par at least equal to the amount of the issue which it secures, and have an interest rate at least as high as that borne by the bonds secured. In order to assure a consistent character for the collateral, it might be required that only bonds of fully controlled subsidiaries (one share more than one half of the voting stock being owned) be used. In case any bonds used as collateral should default, the debtor corporation should be required to substitute other and suitable bonds for those deposited or else retire by purchase an equal amount of the secured debt. Because of the intimate relation between the debtor and the subsidiary corporation whose bonds are being used, such a provision would lack much of the force it would have were the two companies independent. As long as the system was solvent, the debtor corporation could and would be likely to lend assistance to the weaker subsidiary members in the form of loans sufficient to pay interest in order to prevent any actual de-

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Ibid.

Examples of the pledge of practically all outstanding bonds and stocks of subsidiaries are the Community Power & Light Company first mortgage collateral 5's of 1957 and the Federal Public Service Corporation first lien gold 6's of 1947.

faults. Default upon one of the subsidiary bond issues would create the greater burden of substituting a principal sum equal to the full amount of such bonds used as collateral.

1 (b). *Secured by mortgage bonds of the issuing corporation.* Sometimes an open-end mortgage has been drawn in such detail that the management has been embarrassed by subsequent conditions, which render the original terms unsuitable. At the time the original terms of the indenture were framed, a normal coupon rate and a long maturity may have been satisfactory. The indenture might stipulate a maximum coupon rate and a single maturity for the future as well as the initial financing. If interest rates rise substantially by the time later financing becomes desirable, an ordinary coupon rate might entail selling the bonds at too substantial a discount. Furthermore, if the high interest rates seem to be a temporary condition, a long maturity would mean binding the company to that high capital cost for an unduly long time. Under these circumstances, to use the open-end issue for the needed financing would be uneconomical. By depositing the permitted amount of open-end bonds as collateral, another issue, even though for only a smaller amount, can be created with terms as to interest rate, maturity, and call features which will fit the situation.

The deposited bonds will ordinarily exceed the secured issue as to par value, but their market value will often not be greatly different from the total of the secured collateral trust issue. The lower coupon rate of the bonds used as collateral accounts f or their lower market price as a percentage of parity. If the collateral does have to have a greater par value than the bonds which are secured by it, any limitation of the original indenture upon the relation of bonds to added property will be even more restricting with respect to the amount of the collateral trust issue. Thus, if bonds of the open-end issue were limited to 75 per cent of the new property additions, then $750,000 of such bonds could be created upon a $1,000,000 addition to property. Then, if only $800 of 7 per cent collateral trust bonds could be issued for every $1,000 of the 5 per cent open-end mortgage bonds, the issue would be limited to 80 per cent of $750,000, or $600,000. However, this loss of borrowing power does not appear so extreme in view of the fact that the price of $750,000 of 5 per cent bonds would be low in a depressed market and they would probably not realize much more than the sum derived from the smaller collateral trust issue.[6]

An unusual way of meeting the problem outlined would be to issue $750,000 of 7 per cent bonds under the open-end mortgage itself but secure the extra 2 per cent interest under a supplemental indenture as a second lien. In 1923 the Illinois Central Railroad sold $13,447,000 of its refunding mortgage bonds. The mortgage under which the bonds were issued was dated November 1, 1908, and by its terms the coupon rate was limited to a rate not exceeding 4 per cent,

Since such collateral trust bonds are secured by mortgage bonds, they enjoy the same priority as the mortgage bond. When they are secured by a greater par value than their own, they even enjoy an advantage in case of trouble. A bond with such security is a collateral trust bond in name only and is exceptional. The equivalence of this particular type of collateral trust bond with the mortgage bond may be indicated in the title. The bonds might be called "first mortgage collateral trust" or "first collateral trust lien." Titles, particularly unusual ones, are often vague if not inaccurate, and the actual security will need to be examined in every case before any opinion as to the character or quality of the lien can be formed.

1 (c) and 2 (b) *Investment collateral trust issues.* When a corporation owns either stocks or bonds solely as a matter of investment interest, the more reasonable course in case of a need for funds would appear to lie in reselling them rather than in pledging them as collateral for a bond issue. By so doing, the risk of later losses would be eliminated, a hazard which is increased by the added presence of a bond issue with its fixed charges.

The possible explanations for employing a bond issue rather than selling out investments are two: first, that the income from the collateral is greater than the cost of borrowing; and, second, that the price of the security owned is so low that, when the possible profits of future appreciation are added to the ordinary income, the borrowing appears cheaper. In either case the potential profit from using collateral trust bonds instead of selling the investments should be sufficiently large to compensate fully for the risk of the operation. Stock investments ordinarily offer the holder a greater potential profit; bond investments offer the more certain profit, if any. When the need for cash happens to be temporary, issuing collateral trust notes, maturing in three to five years, might be preferable to selling a well-selected and desirable list of investments, only to repurchase them later.

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the going interest rate at the time the first bonds were issued. In 1923 these bonds would probably have sold in the neighborhood of 80. A 5 per cent coupon was attached to the new bonds, interest at the rate of 4 per cent and the principal being secured under a supplemental indenture by the refunding mortgage and the additional 1 per cent by a second lien subject to the refunding mortgage. These new 5 per cent bonds were sold at 99.

Another instance in railroad finance of this same procedure was the Southern Railway development and general mortgage bonds. An issue of $30,000,000 was sold in 1922 under a mortgage created in 1906 which limited the rate of interest to 4 per cent. The new issue bore a 61 per cent coupon, and the 2i per cent was secured by a supplemental indenture, which, although not giving mortgage security, covenanted that, in case a new mortgage were placed on the property at a later date, this interest obligation should be equally and ratably secured.

The security of such a bond is imperfect and is justified only by the practical necessities of a situation created by a mortgage which should have been drawn with greater foresight in the first instance.

Ordinarily the best practice for corporations is to invest temporarily idle funds in such a manner that they can be readily reconverted into cash without appreciable danger of loss. Some of our very large and wealthy corporations have seen fit to invest considerable funds as a permanent rather than a temporary policy.[7] Without attempting to weigh the merits of such a policy at this point, it might be noted that, if such commitments provide a more stable income than that derived from the business, something might be added to the credit rating of the corporation.

The particular type of collateral trust bond just discussed is now rarely used except by investment companies. Because investment trusts are purely financial institutions, their problems are not ordinarily treated in a work concerned with business finance. (The investment trust offers its own stocks, or stocks and bonds, to the public as investments and gives the benefits of diversification and professional investment skill.) Should trading on equity appeal to the management of such an investment institution, it would be actuated by the same motive as stated in Chapter 6, the hope of profit, either through added current income or from appreciation sufficient to compensate for the risk incurred in putting out a bond issue of its own.

Protective provisions for this variety of collateral trust bonds would attempt to guard against deterioration of the collateral. The purchaser of the bonds might, however, be content to assume the risk of depreciation in the original collateral during the life of his bond. This attitude would be most likely in the case of diversified bond collateral of good quality. A very mild provision requiring that new bonds be substituted in the event of default of any issue might be regarded as sufficient.

More stringent provisions would be reasonable where the collateral was more speculative, as in the case of stocks. Since the investment type of collateral being discussed would very generally have a fairly active market and the current price would be readily ascertainable, the maintenance of its total market value in excess of the bond issue might be stipulated. The amount of the original margin of protection would presumably be governed by the quality of the collateral and the conditions at the time of issuance. The poorer the quality and stability of the security, the higher is the margin of excess collateral likely to be required. Similarly, the more inflated the general security market, the greater is the need for a large margin of protection.

When common stock is used as collateral, a requirement of as much as $1,500 or $2,000 of value behind every $1,000 bond issued

[7] This question of the retention of funds not required by the immediate demands of the business is discussed in Chapter 21.

would not appear excessive under ordinary conditions. Failure to maintain a certain minimum margin of security, which might be less than the original proportion, could be made to constitute a default, which would permit seizure and sale of the collateral by the trustee, although such a provision would be unusual.[8] The failure of the income from the collateral to maintain a certain minimum ratio to the interest charges might likewise be made a test of adequacy, but the fact that the market value usually anticipates any reduction in dividends or default in interest explains why such a second test might be regarded as of doubtful virtue as compared with the first, and so valueless.

The relatively infrequent use of even the former requirement—namely, that a given market value of collateral be maintained—even when the value is readily ascertainable, may be explained in three ways. First, market fluctuations are felt to be too often the result of temporary conditions. Sometimes rather considerable changes in stock prices result from market conditions that have little relation to changes in property values or earnings behind the securities. Second, there is the extreme difficulty of finding any standard for maintaining collateral that would not at some time during the normal life period of a long-term bond work some injustice. The business cycle, for example, produces extreme depression in both market prices of securities and in corporate earning power from time to time. Any unreasonable severity toward the debtor corporation during a period of temporary difficulty would threaten not only the well-being of the corporation but also of the bondholders. Bondholders would be unwise to precipitate a default when leniency for a short time would permit a restoration to normalcy. In the third place, the bondholder often appears willing to abide by the results of a single original evaluation of the collateral.[9]

In view of the difficulty of creating arbitrary standards for collateral, the unwillingness of bondholders to permit substitutions of new for old collateral may be appreciated. While equivalence of market value can be required in substitutions, it is virtually impossible to draw a protective clause that will insure equivalent quality in making collateral changes.[10]

See pp. 151-152 for provisions in a similar situation.

[9] Analogies with short-term bank loans secured by collateral are likely to be misleading. Fundamental differences are that (a) the longer maturity of the bond issue means that the collateral is almost certain to encounter a period of depression and greatly reduced market value, (b) the scattered bondholders acting through a trustee cannot act with the promptness and skill of a single bank lender, and (c) the large amount of the bond collateral in perhaps a single or very few issues makes liquidation difficult as compared with the diversified collateral of the typical large loan by a bank.

[10] The various restrictions upon substitutions and withdrawals and the procedure as to valuations and approval as to class and kind of collateral upon substitution may be studied in the indenture of the Alleghany Corporation

2 (a) (1). *Secured bonds of holding companies.* Although pure holding companies occasionally own bonds, the great bulk of their assets consists of stocks of controlled companies." When •secured bonds are issued, stock collateral is the natural security. The purposes and the methods of the holding company are discussed later, but it is appropriate to note here that its most important use has been to acquire and hold control of public utility properties. [12]

The differences between collateral consisting of stock of controlled companies and investment securities are considerable. Because a market is lacking for stocks so completely held, no clues may exist as to the independent value of the former type of collateral. The earnings of the whole system are usually consolidated into a single report, and the investment quality of the bonds is estimated from the regularity and adequacy of the combined earnings rather than from a study of the individual stocks pledged. Sometimes a corporation has been able to sell collateral trust bonds without disclosing more than the dividend income which it collected from its stock holdings, but this does not represent the best financial practice or the standard that will prevail under the Securities and Exchange Commission. Allowance is made in the investment market for the risk entailed by the prior charges of the subsidiary or operating company bonds and preferred stocks which take precedence over their common stock and so over the collateral trust bonds based upon that stock. Theoretically, it is possible that no such prior securities may be issued, in which case the common stock of the operating companies would be entitled to all of the earnings, and any collateral trust bonds secured by this stock would be a first lien. Practically, mortgage bonds secured by the operating company's fixed assets are a ready and inexpensive method of raising funds because of their superior repute, so that collateral trust bonds of .the holding company are likely to have junior status.

2 (a) (2). *Pledge by operating company of control or working interest in stock with an independent market.* Stock collateral of another type occurs when an operating company wishes to add to its system or to secure an ally by buying control or a substantial block of stock in another operating company. When a purchase of this sort is made, the newly acquired stock is very likely to have a market record which will indicate the value of the pledged securities. Even more fundamental for the purpose of showing the long-run value of such stock will be the financial statements which the newly controlled corporation has issued and may continue to issue.

collateral convertible 5's of 1944. Changes in provisions may be made by the corporation with the consent of the holders of 60 per cent of the bonds outstanding.

"For exceptions, see footnote 5, p. 145.

"See Chapter 25 for a discussion of the holding company.

A notable example illustrating this type was the purchase by the New York Central of the Vanderbilt holdings of Lake Shore and Michigan Southern and of Michigan Central stock in 1898 and 1900 through the issuance of 32 per cent collateral trust bonds secured by the stock purchased. Mitchell, writing in 1906 on the use of the collateral trust mortgage in railway finance, stated that the acquisition of other companies was the chief purpose of collateral trust issues in that field.[13]

The borderline case between this type of collateral 'and the preceding one is found in the company formed solely to acquire control of two or more companies and to finance that purchase. The Alleghany Corporation, formed by the Van Sweringen interests in 1929, acquired substantial holdings in the New York, Chicago & St. Louis, the Erie, the Chesapeake & Ohio, and the Pere Marquette, proposing to unite these roads in the so-called Nickel Plate merger. Stocks of all these railroads were well known and both active and marketable, and they continued so after the purchases of the Alleghany Corporation. They were deposited as security for the collateral trust bond issues of the Alleghany Corporation. The collateral was of the type just discussed in that it had a ready market and was subject to ready appraisal, but the company was of the pure holding, rather than the operating, type.

The marketability characteristic creates a resemblance between this type of issue and the "investment" collateral type. For this reason considerable similarity is likely to be found in the form of the bond in such matters as protective provisions. The Alleghany Corporation agreed to maintain collateral with a market value of one and one-half times the face, or par, value of the outstanding bonds. If on any of the quarterly check-up dates a deficiency was found, the company agreed to deposit an amount sufficient to bring the security back to this minimum standard. The weakness of the agreement is revealed by a reading of the indenture, which states that a failure to maintain the standard does not constitute a default. The only penalty, if so strong a term may be applied, was that no dividends might be declared on the common whenever the 150 per cent collateral value provision was not observed, and the pre ferred dividend had to be omitted whenever the deficiency continued for 30 days.[14]

2 (a) (3). *Pledge by operating company of stock of special subsidiaries to make pledge of fixed assets complete.* The third type of stock collateral of a controlled company is usually of minor im-

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" Mitchell, *op. cit.*

"The trustee retained all income from the collateral after July, 1931. Until the 150 per cent ratio is restored, the trustee is authorized to vote the pledged securities.

portance. In certain' cases an operating company wishing to make the security as complete as possible will include the stock of any subsidiaries with the mortgage lien upon its directly owned plants and other real estate. Thus, the Goodyear Tire & Rubber Company first mortgage and collateral trust 5 per cent bonds of 1957 were secured not only by the fixed assets but also by stocks of subsidiaries, mainly the Goodyear Tire & Rubber Company of California and the Goodyear Tire & Rubber Company of Canada, Ltd., the latter company being the largest rubber company in Canada. The bond circular for this issue stated:

> The bonds will be the direct obligation of the company and will be secured, in the opinion of counsel, by direct first mortgage upon fixed assets (to be defined in the mortgage) of the company, now owned and hereafter acquired, carried on the books of the company as of December 31, 1926, at approximately $45,000,000 after depreciation, by pledge of stocks of certain subsidiaries including stocks representing a net worth of over $25,000,000 as shown by the books of the respective subsidiaries as of December 31, 1926, and by pledge of obligations totaling more than $20,000,000 representing advances to subsidiaries.

As in the case of all stock collateral, the value of this security may also be impaired by unwise financing of the subsidiary company. Since in this kind of situation the subsidiary is a minor unit and its independent financing is not ordinarily so essential to economy as it is likely to be in the types of situation previously discussed, an agreement may be made that the subsidiary shall not be allowed to create any prior obligations, at least beyond those already existing. The company might also be reasonably expected to agree to acquire and retain any further common stock issued by the subsidiary.

In general, where either stocks or bonds of controlled companies are used as collateral, the grave danger exists that mismanagement will permit the properties to deteriorate. They may be drained by excessive dividends at the expense of adequate maintenance or overburdened with debt incurred to achieve too grandiose expansion. Furthermore, once the fatal trend has been established, it may well lead to destruction, because the means of interference by interested bondholders are generally lacking even should the trouble be apparent. As long as the properties or any part of them can bear the total load, actual default will be avoided. When, and if, a breakdown does finally occur, the accumulated strain is likely to leave the collateral trust bonds in an extremely weak position, especially if they occupy a junior position, as they so frequently do.

Factors affecting credit standing. In order to finance to the greatest advantage,, the corporation's management should understand the attitude of the investment market toward its bonds. Three

factors are recognized as determining the credit standing of the collateral trust bond. The first, which is the most obvious and is the one that has been chiefly commented upon here, is the value and probable future value of the security pledged. When the issue is sold to the second-grade, or individual buyer, market, much—generally too much—emphasis will be placed upon the current value of the collateral at the time of the bonds' flotation. Where the bonds are of sufficient quality to appeal to the high-grade, or institutional, market, primary attention will be given to the "probable future value" of the collateral during the life of the bond.

The second factor, one which has had no mention thus far, is the general credit of the issuing corporation. General credit standing may be measured by the rating which a debt obligation would have without any specific pledge or lien. Almost always exercising some degree of influence, it may at times be actually the more important. When it outweighs the collateral as a source of strength, an unsecured issue may serve the needs of the corporation better. In such a case the credit of the company instead of the collateral is the basis for the standing of the bonds. The rule may be deduced that a bond should be rated on the basis of the stronger factor, whether the collateral or the general credit of the corporation. Of course, a collateral trust bond can never be weaker than a general credit obligation, because it can always fall back upon the position of general creditor after exhausting the collateral.

The third factor affecting standing is subsidiary to the first and consists of the protection provided by the terms of the indenture. As already stated, proper protection consists in preventing any depreciation of the security or any substitutions in collateral which might be injurious, as far as an indenture can accomplish that end.

Equipment Obligations[15]

Railroad equipment in the form of cars and locomotives, commonly called *rolling stock*, ranks next after stocks and bonds as the most popular form of personal property used to secure corporate obligations. The steam railroads of the United States in their reports to the Interstate Commerce Commission showed about 5 per cent of their indebtedness in this form of obligation in 1935.[16]

This special form of obligation was originally employed by railroads experiencing difficulty in financing either because of their

[15] The most complete reference work on this subject is Kenneth Duncan's *Equipment Obligations* (New York: D. Appleton-Century Co., 1924). Among textbook discussions Dewing's 1926 edition is unique for completeness and wealth of illustration. A. S. Dewing, *Financial Policy of Corporations* (New York: Ronald Press, rev. ed., 1926), Book I, Chapter 7.

[16] See page 293.

youth or their poverty. As its safety became apparent and the interest cost decreased correspondingly, its use spread to strong railroads also, so that since the turn of the century it has grown in use and popularity.[17]

Forms of equipment obligations. Three possible forms are known: the equipment mortgage, the conditional sale, and the lease, or Philadelphia, plan. The equipment mortgage is a simple chattel mortgage upon the equipment; rarely is it employed. The conditional sale arrangement is also but little used. The conditional sales contract attempts to retain the title of the property in the seller until the buyer has completely paid for it under a partial payment; or installment, plan. The weakness of this arrangement is that in some states, such as Texas and Louisiana, a contract of this type is not allowed to hold, so that if the debtor-buyer becomes financially involved, bondholders under a mortgage with an after-acquired property clause, or other creditors seeking an attachment, might set up a claim which would prevent the vendor from repossessing his property to satisfy his unpaid balance." As long as such a weakness exists in any state, the danger will be present in the case of movable property like railroad cars and locomotives, which may wander into such a jurisdiction and thereupon become subject to this disability.

Under the third, and now almost universally employed, lease plan, the equipment is rented to the railroad until a sufficient sum has been paid in rentals over a period of years to pay for the entire cost as well as necessary interest upon it. Under this arrangement the rail-

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"Equipment trust obligations outstanding for all classes of railroads in the United States and their nonoperating subsidiaries are shown in the following table:

Year	*Amount*
1900	$ 60,308,320
1905	186,302,906
1910	353,341,578
1915	370,878,115
1920	652,781,388
1925	1,079,025,694
1930	984,437,860
1935	538,858,144

Source: Interstate Commerce Commission, *Statistics of Railways in the U. S.* (annual). Figures in early years are subject to some error, for the Commission found some roads reluctant to report these obligations as debt on grounds that liability was only for rental payments.

"Dewing takes the position stated above, strongly favoring the lease plan, although he mentions a case where the conditional sale was permitted when a railroad's credit was unquestionably high, while the Philadelphia plan was insisted upon for roads with weak credit. Dewing; *op. cit.,* p. 212. No good reason appears for not employing the stronger form of instrument in every instance. However, with the spread of installment selling in retail merchandising, the laws relative to conditional sales have become more favorable to the creditor using that type of contract to repossess goods for which payments are in default.

road wishing to purchase cars and locomotives enters into an agreement with the manufacturer, who builds the equipment according to specifications. When completed, it is transferred to a third party, a trustee, who has title to the equipment and leases it to the railroad. The rentals are arranged so that a certain amount will be paid each year upon the cost, together with a fixed rate of return upon any unpaid balance. These payments are made to the trustee for the benefit of certificate holders, the certificates having been sold to pay off the manufacturer, In order to create a margin of safety for these investors, an original down payment, of say 15 per cent, will usually have been made by the railroad.

Since the investor is not legally a direct creditor of the railroad but a part owner in certain leased equipment held by a trustee, his instrument is not a bond but an equipment trust certificate, and his income is not interest but a dividend, or rental, payment. However, to compare such an obligation with ordinary common stock is misleading. The obligation of the railroad to pay a stipulated rental is as clearly a fixed charge and as much a liability as that to pay interest upon a bond. To default upon a rental payment would have the same effect as the similar failure to pay interest,,for insolvency would result. Through the creation of the trust, then, the ceifiiiate owners are the beneficiaries of a fixed claim upon the lessee railroad and so by indirection are in effect its creditors.[19] The holder also_has a direct legal against the railroad becaliae-,-e-hatter- endorses on thecertificate aguarantee that it will carry out its lease obligation.

By paying off a portion of the certificates each year or half year, by serial retirement, and redeeming all of them over a term that is less than the normal life of the equipment, a margin of property value in excess of the unpaid balance is maintained. Prior to the first World War ten years was the common period withinwlii cli thC milt o a ds rati d OFisRie OrCitificaes. - Iii: recent years, hoWever, - fifteen-year period EaSbecome the more popular. Although this means a less conservative standard than formerly, it still results in complete retirement within the average life expectancy of railroad equipment, which is at least twenty years.

By making certain assumptions with respect to the life of the equipment and the rate of depreciation, the general life history of

"Because the railroad has no title under the lease plan, some companies have followed the policy in the past of not including such obligations among their liabilities, pursuing the strict legal construction of the lease contract. But from an actuarial standpoint the amount of liability to pay rentals sufficient to equal interest upon $10,000,000, as well as to retire that principal sum, is $10,000,000. For that reason the current practice of railroads, required by the commission's uniform accounting system, in reporting equipment trust certificates as a part of their long-term debt is sound and avoids a misleading balance sheet.

the security for an equipment trust certificate may be shown graphically, as in Figure 10.[20]

,The situation illustrated is as follows: The equipment is bought for $1,250,000, of which $250,000 is paid down. The estimated useful life of the equipment is twenty years. Equipment obligations of $1,000,000 are issued, to be retired serially in fifteen years at the

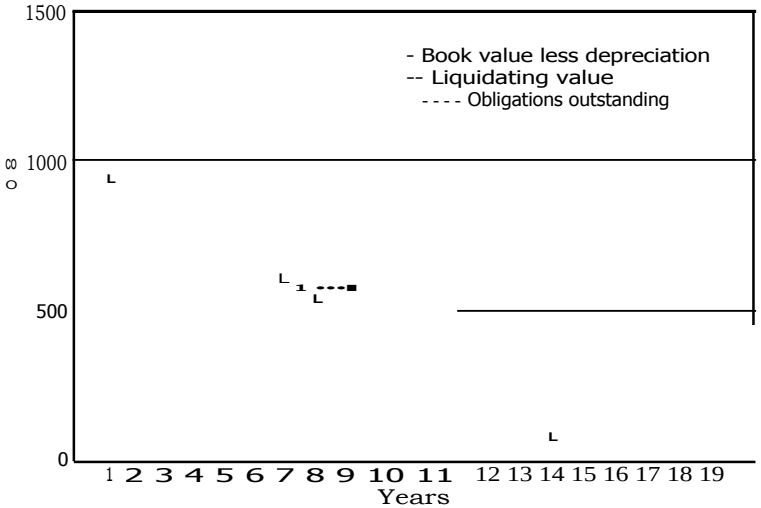

Figure 10. Life History of the Security for An Equipment Trust Certificate.

rate of $67,000 per year ($66,000 every third year). The obligations are retired faster than the equipment depreciates (straight-line depreciation of $57,500 per year is charged), and the spread between amount outstanding and both depreciated value and liquidating value widens as time goes on. The book value is the original cost ($1,250,000) less depreciation, totaling $1,150,000 (cost less scrap value) over the twenty years, spread equally over the estimated life. The liquidation value is the estimated market value, which declines most rapidly in the early years. Table 6 shows these relationships.

High standing of equipment certificates. To appreciate the high standing of equipment trust certificates when they are regular in form, their excellent record must be kept in mind. Dewing, writing prior to the depression beginning in 1930, stated:

In only one instance in the recent history of railroad finance has a reorganization committee forced the holders of equipment obligations to accept a compromise, and in this instance the bonds were issued under an

[20] This figure and the accompanying table are based upon figures employed by Duncan, save that the assumption of a ten-year period is altered to fifteen years to accord with current practice. Duncan, *op. cit.,* pp. 182-183.

unusual and weak agreement, and in two instances only thruout the varied financial history of our American railroads for the last half-century have the holders of equipment bonds been compelled to assume possession and resell the actual, physical equipment itself 2I

During the receiverships that marked the extreme and prolonged depression of the 1930's, the record of equipment trust obligations

TABLE 6

VALUE OF SECURITY FOR AN EQUIPMENT TRUST CERTIFICATE IN RELATION TO OUTSTANDING OBLIGATIONS OVER A 20-YEAR PERIOD

Period	-Value of Equipment- Depreciated	Liquidating	Obligations Outstanding
At acquisition	$1,250,000	$1,250,000	$1,000,000
End 1st year	1,192,500	1,000,000	933,000
2	1,135,000	900,000	866,000
3	1,077,500	825,000	800,000
4	1,020,000	750,000	733,000
5	962,500	700,000	666,000
6	905,000	660,000	600,000
7	847,500	620,000	533,000
8	790,000	580,000	466,000
9	732,500	540,000	400,000
10	675,000	500,000	333,000
11	617,500	460,000	266,000
12	560,000	420,000	200,000
13. „	502,500	380,000	133,000
14	445,000	340,000	66,000
15	387,500	300,000	Paid
16	330,000	260,000	
17	272,500	220,000	
18	215,000	180,000	
19	157,500	140,000	
20	100,000	100,000 (Scrap value)	

was unusually good. At a time when approximately one third of the railroad mileage of the country was, being forced into receivership, the number of defaults was relatively limited. Some railroads were

Dewing, *op. cit.,* p. 216.

Wheeling and Lake Erie Railroad 5 per cent equipment bonds issued in 1902 were payable in installments until 1922, twice the usual period of conservative practice. The receiver appointed in 1908 did not default on either sinking fund or interest till 1915. In 1916, however, the reorganization managers offered to settle the back interest and pay 35 per cent of the face of the certificates in cash and the remaining 65 per cent in new 4 per cent sinking fund equipment notes, one sixth to be purchased and canceled each year until the issue was redeemed. *Ibid.,* p. 208, footnote z.

Two instances of repossession and sale occurred in the receiverships of the Detroit, Toledo and Ironton (1908) and the Buffalo and Susquehanna Railway. In the former instance the equipment exceeded the needs of the road and the equity of the company was slight ; in the latter, failure culminated in the abandonment and dismantling of the road (1916). In both cases interest and principal were ultimately recovered by disposing of the equipment. *Ibid.,* p. 216, footnote gg.

obliged to make delays in the payment of principal and interest, but these were often confined to the period of grace; others were obliged to seek an extension of the principal, but continued interest payments; only a few required the actual repossession of equipment or compromise of debt.[22] This fine record must be attributed in part to the strong position of a lien upon the newer and better equipment and in part to the loans extended by the Reconstruction Finance Corporation. The unusual character of the strain placed upon these obligations can be appreciated only by noting the unusual decline in commodity prices, which lowered the replacement value of the equipment, and the extraordinary decline in traffic, which resulted in all railroads having a surplus of equipment.

The strong position of equipment trust obligations may be explained as follows: (1) Rolling stock is essential to operation; (2) continued operation and reorganization rather than liquidation is the normal course subsequent to failure; (3) railroads, especially of the sort which fail, do not usually have a surplus of equipment, which would permit them to dispense with the "leased" equipment, and (4) to obtain equipment in other directions, either by purchase or hire, would invariably be more expensive than to continue the remaining payments upon the "leased" equipment in which they already have an investment. And, finally, if this train of logic breaks down at some point, the lessor can seize and remove his equipment, for the railroad has no shred of title, and then dispose of it as secondhand equipment. Because a margin of safety is maintained throughout the life of the issue, this procedure should ordinarily result in full recovery, even though it entails some delay. In the majority of instances this final remedy is avoided because of the needs of the railroad, which lead the receiver to continue payments so that the equipment trust obligations may not be disturbed by the disaster.

Tested out on numerous occasions by the trials of reorganization, such issues, when standard in every respect, have come to occupy a position comparable to that of the choicest senior liens. If the credit of the railroad is weak, the saving in interest charges by the use of the equipment trust certificate is considerable, its cost being

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22 One of the few defaulting equipment trusts was the Series D 5's of the Florida East Coast Railway. The trustee was obliged to take over the equipment and sell it. In 1937 each holder of a $1,000 certificate received $430, with the possibility of receiving something more later.

In the period 19311938, out of 120 equipment trust issues of 21 bankrupt railroads, 73 issues of 16 roads remained undisturbed, 23 issues of 3 roads were extended as to maturity, and 23 issues of 2 roads were exchanged for other obligations of the same par value but at a reduced rate of interest. The holders of only one issue, that of the Florida East Coast Railway, referred to above, suffered a loss of principal. L. W. Grossman, *Investment Principles and Practice* (New York: Longmans, Green & Co., 1939), pp. 21-22.

decidedly less than that of other choice senior liens of such a company.

Use by industrial companies. Special types of equipment have been used as security by other than railroad companies. Oil companies have purchased tank cars with the aid of the equipment trust certificate; steel and coal companies have similarly purchased special cars; and an equipment manufacturer, such as the General American Transportation Company, has issued equipment obligations secured not only by ordinary tank cars for the transportation of petroleum and its products but also by specially constructed ones for milk and chemicals. Because of the more specialized nature of such equipment, greater precautions are ordinarily taken for safeguarding issues so secured. Not only is the initial payment likely to be higher but the period of payment is usually much shorter, running, say, only five to seven years, even though such cars are as durable as the general purpose equipment of the railroad.

Recently air transport companies have financed new flying equipment by the use of the certificate. Equipment of other types, such as the ships of a marine company, has been used as security but must be regarded as of inferior standing. Not only is it usual for such equipment to be less standardized and more generally subject to obsolescence, but the company itself—being engaged in a competitive industrial field—is subject to greater hazards. Such a business is much more likely to fail and be liquidated than a corporation in the public service class. In the event of repossession the problem of resale may have to be solved in a secondhand market of doubtful nature. Consequently analogies drawn between the unusually safe and successful equipment trust certificates secured by railroad rolling stock and those secured by other forms of property are likely to be misleading.

CHAPTER 8

CORPORATION BONDS *(Continued)*

Bonds Secured by Credit

Debenture bonds. *Debenture* in its derivative sense means "owing," and so might reaSnYmbl-y- apPlied to any bond, if us e in this country had not come to "restrict the term to bonds which are without any sfeeific--pledge of property[1] Such bonds are commonly said to be unsecured, bfit any property not otherwise pledged acts as security in the broa sense of the word for the debenture bondholders and other general creditors.

Some debenture issues may not differ at all in strength and investment worth from mortgage bonds, but the magic title "first mortgage" is lacking. Sentiment is strong in such matters and must be counted upon in the plans of those who manage the finances of a business, especially when it has acquired the sanction of long-standing custom or of a specific legal requirement governing the investments of fiduciaries in states which are an important part of the bond market. The mortgage is solely a device for giving preference among creditors, but regardless of how slight the need for preference may be, the pledge of definite property is generally helpful in dispelling vague fears of possible hazards. Other protective provisions of the sort that have already been discussed for other kinds of bonds and for preferred stocks, such as limitations upon dividends that might unduly weaken working capital or requirements for gradual retirement, may be incorporated in the trust agreement protecting a debenture bond issue.

In case of failure and liquidation, secured creditors enjoy a prior claim only on the specific assets pledged for their security. If the sale of the specific assets does not satisfy the secured debt, the unpaid balance shares a claim against general assets along with gen-

[1] The English practice of applying "debenture" to all kinds of debts is thereby explained. Thus the Dunlop Rubber Company of that country has a capitalization consisting of 5-i per cent first mortgage debenture stock, 6 per cent second mortgage debentures, 61- per cent cumulative A preference shares, 7 per cent cumulative B preference shares, 10 per cent cumulative C preference shares, all nonparticipating, and ordinary shares (1928). See reference to debenture stock on p. 108.

eral creditors. Suppose, for example, that the balance sheet of a corporation before liquidation is as follows:

Assets		*Liabilities*		
Plant and Equipment	$500,000	Common Stock ... $250,000		
Inventories	200,000	Less deficit 150,000		$100,000
Accounts Receivable	125,000			
Cash	25,000	Preferred Stock		150,000
		First Mortgage Bonds		150,000
		Second Mortgage Bonds		100,000
		Debenture Bonds		200,000
		Accounts Payable		150,000
	$850,000			$850,000

Upon liquidation, after allowing, for all expenses, the following amounts are realized from the various assets: Plant and Equipment, $225,000; Accounts Receivable, $100,000; Inventories, $62,500; Cash, $25,000. If it is assumed that the mortgage bonds are specifically secured by the plant and equipment, the various claims would be paid as follows: First Mortgage Bonds, $150,000; Second Mortgage Bonds, $87,500; Debentures, $100,000; Accounts Payable, $75,000.

In so far as the modern plan of a single open-end mortgage bond issue succeeds in simplifying the funded debt of the corporation into one large issue, an approach has been made to debenture financing. Where all have equal preference, then none has preference. The objection to this statement would doubtless be made that a mortgage usually contains protective provisions against weakening the security in a manner that is not generally common in debenture contracts. While this is true, debentures can be secured by indentures which would provide equivalent protective restrictions, such as limiting the issue in proportion to property additions and earnings. While such standards should not be recommended as ideal, an illustration may be found in the Associated Electric Company debentures, which were issued under an agreement restricting their use to refunding or the acquisition of property at not more than 75 per cent of the cost or fair value, whichever is less. Earnings must equal twice all interest charges, including bonds and preferred stocks of subsidiaries before depreciation, or one and one-half times after the deduction of that item.[2]

[2] When the company reaches a size where consolidated net earnings exceed $15,000,000, the first $7,500,000 of fixed charges must be covered twice and the balance one and three-quarters times. Other stipulations also exist respecting the disposal of proceeds when subsidiary properties are sold. Relinquishment of control must involve complete sale. The customary requirements covering proceeds prevail; they must be utilized in retiring bonds or underlying securities or go toward property additions. Furthermore, if 10 per cent of consolidated earnings were derived from a property subsequently sold, the entire proceeds must be applied to bond retirement. The company also covenants

A very common provision, especially if any subsequent financing is at all likely, is an agreement to secure the debentures equally and ratably should any mortgage be created at a later date. Under this covenant some bonds originally issued as debentures and still designated by the original title are secured by strong mortgage liens.[3]

Types of companies using debentures. Debenture bonds may be employed by companies with very strong credit.[4] Credit strength may be the factor making a specific pledge of property unnecessary. On the other hand, this kind of issue may be put out by a company because it has little to offer in the way of security. The latter situation has sometimes arisen in railroad and public utility finance, and, when it does occur, some special privilege of possible future value, such as convertibility, may be added to compensate for the risk of such a loan. If the company enjoys increased prosperity during the life of the conversion privilege, the bondholder finds it profitable to convert his obligation on the agreed terms into the common stock of the company.[5]

Most corporations belong neither to that class which is so rich as to find a mortgage superfluous in its borrowing, nor to that which is so poor as to be without unencumbered assets suitable for some kind of mortgage. If a company does fall in the latter class, it is very

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not to create any liens in addition to those existing at the date of acquisition, except purchase money mortgages.

Another debenture protective provision, which more closely resembles one which would be expected in the indenture of a collateral trust issue, is that of the General Gas and Electric Corporation. This public utility holding company agreed in the indenture securing its $50,000,000 issue of 41 per cent and 5 per cent serial gold notes of 1931-1935 not to pay cash dividends on its common stock or redeem or purchase its capital stock of any class in whole or in part if thereby the value of its assets would be reduced to less than 150 per cent of its total indebtedness; and that it would not create or assume any additional debt that would make the total exceed 50 per cent of the then value of its assets.

The New England Telephone & Telegraph Co. debenture 4's of 1930 and debenture gold 5's of 1932 (issued in 1910 and 1912, respectively) were equally secured with various series of subsequently issued first mortgage bonds by the terms of their indenture. The first issue of first mortgage bonds, the Series A 5's of 1952, were issued in 1922, and the two debenture issues were given equal security with the new mortgage bonds.

Prominent illustrations of debenture financing may be examined among industrials in the American Radiator debenture 41's of 1947, the Liggett & Myers debenture 5's of 1951, and the Socony Vacuum debenture 31's of 1950; among railroads in the Atchison, Topeka, & Santa Fe Railway convertible debenture gold 41's of 1948 and the Pennsylvania Railroad debenture 31's of 1970; and among utilities in the American Telephone and Telegraph debenture 31's of 1966, the Consolidated Edison of New York debenture 31's of 1956, and the American Power and Light (holding company) debenture 6's of 2016.

[4] Thus, when it fell upon difficult times in 1915, the New York Central Railroad Co. issued convertible debenture gold 6's of 1935, most of which were converted into common stock prior to the expiration of the privilege. Again, convertible debenture 6's of 1944 were sold in 1934 and converted in 1937.

likely to be barred from the list of borrowers. A class of corporations remains, however, that finds the debenture bond desirable for the positive reason that the avoidance of any pledge is financially valuable. Manufacturing and merchandising concerns often wish to conserve their mercantile and bank credit. If their fixed assets are mortgaged to bondholders, then trade creditors and banks are compelled in the event of insolvency to rely wholly upon the current assets—that is, inventories, balances due from customers, and cash—for, when failure overtakes a business, little surplus is likely to remain from the fixed properties after the satisfaction of bondholders with a mortgage upon that asset. In fact, if the fixed property is insufficient, the bondholders will also have a claim, along with the general unsecured creditors, for the amount of any deficiency. When, however, debentures rather than mortgage bonds are used, the short-term unsecured creditors, such as banks lending upon unsecured promissory notes, have an equal right to share in proportion to their claims in *all* of the assets. Consequently, for those types of business employing short-term credit—that is, mercantile and manufacturing concerns—debentures, even though they cost the corporation slightly more in the way of interest charges, will be advantageous in preserving the general unsecured credit of the company. Such credit standing would have value in lowering the charges of the banker as well as increasing the possible line of credit and so the possible volume of operations. Inasmuch as the current assets have greater relative importance for industrial corporations than for public service corporations and are not ordinarily made the subject of a lien, the pledge of fixed assets would be less important in the former field. It is significant, however, that industrial financing is less frequently accomplished through the use of debentures alone than through mortgage bonds and is found most often among the larger corporations with prime credit standing. [6]

Since public service corporations have virtually all their property in fixed form, they do not have this short-term financing problem, and for them this advantage of the debenture is nil. A further compulsion acting upon public service corporations is the requirement in some states that a bond must be secured by a first mortgage in order to be a legally permissible investment for trustees, savings banks, and life insurance companies. Since this "legal" market is highly important to the corporate borrower seeking funds at the lowest possible rate of interest, a mortgage is likely to be given whenever possible by the public service corporation. Since the obligations of industrial corporations are often ineligible in the more important states, the mortgage feature has less importance, especially where the investment quality of the bond issue is obviously high.

[6] See pp. 249-250.

Among leading financial corporations the debenture is more commonly employed than the collateral trust bond. Holding companies in the utility field and investment trusts have preferred to avoid the pledge of their assets because of the difficulties that arise when they wish to sell a part of their holdings and substitute new property. The issues of such corporations are not characteristically regarded as in the class of prime investments. Unable to qualify their bonds in many states as "legal" investments, these companies sell their bonds to individuals and sometimes to commercial banks. These buyers, unhampered by the specific requirements of statutory investment rules, are willing to buy debenture bonds if the quality and yield meet the standards set for their particular investment portfolios.

Bonds with supplemented credit. Sometimes another besides the original debtor corporation assumes responsibility for a bond because of some financial interest in the fortunes of that debtor. Whatever standing the bond might have independently is supplemented then by the general credit of this second party. The bond leans upon two supports instead of one. In effect, it is a debenture obligation of the second party.' If, as is usually the case, the original debtor, who is primarily responsible, gave a lien, it becomes a question as to whether this lien (or, where no lien exists, the general credit) of the first corporation is better or poorer security than the general credit of the second. [8] The stronger of the two supports should determine the investment rating of such a bond and consequently the cost of the borrowing.

Guaranteed bonds. Guaranteed bonds form a first class in this group of twice-fortified obligations. The guarantee may be direct or indirect. A direct guarantee would usually arise at the time of issue in the case of a holding company desiring to aid the sale of bonds by a subsidiary. Where the unsponsored credit of latter is insufficient or such that the added credit of the former will materially lower the cost of the loan. Such a guarantee assures the bond purchaser that the holding company will not cast the subsidiary adrift even though the latter's business proves unprofitable. The guarantor benefits by the lowered interest cost made possible by the better standing of the bonds. Lower bond interest charges mean greater net profits, which are passed along as dividends upon the common stock that is owned by the guaranteeing holding com-

Strictly speaking, this statement is not true, for reasons that appear in the ensuing discussion.

An interesting example of a guarantee so potent as to make a lien superfluous was the unconditional guarantee by the Government of the Dominion of Canada of the principal and interest of the Canadian National Railway Company 20-year 4½ per cent gold bonds of 1951, mentioned in footnote 11.

pany.[9] An analogous case is found when a wealthy person who controls a company guarantees its bonds. Such an issue is apt to be of smaller size, but the governing principles are the same as for one that enj oys a corporation's guarantee.[10]

Governments may also guarantee the obligations of private corporations in order to assist their founding or expansion, so as to serve some primary community need which would otherwise go unserved. In our own early development, various states of the Union occasionally guaranteed obligations or made loans for such purposes as railroads, canals, and banks in order to aid in the development of resources—private capital being unwilling to take the risk unaided. Many of these ventures came to grief, and the taxpayer was asked to shoulder the consequent burden. The resultant tax load was an important factor leading to defaults. Most of the present constitutional restrictions forbidding the use of state credit for private purposes found their origin in the misfortunes.of this period.[11]

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[9] The Safe Harbor Water Power Corporation's $21,000,000 issue of first mortgage sinking fund gold bonds, 41 per cent series due in 1979, was unconditionally guaranteed by the Consolidated Gas, Electric Light and Power Company of Baltimore both as to principal and interest by endorsement on each bond. At the time of issue the hydroelectric development at Safe Harbor, about forty-five miles from Baltimore, was still under construction and could show no demonstrated earning power. The guarantor company and the Pennsylvania Water and Power Company owned all the common stock of the Safe Harbor Water Power Corporation, and they agreed to supply any further funds needed for the completion of the initial project by the purchase' of additional common stock over and above $9,000,000 worth, which had already either been paid or subscribed for. Furthermore, such a generating company might be fairly helpless without the market for its power which is provided by the controlling companies. Guarantee, in such a case, is evidence of continuing good faith toward the corporate offspring.

An illustration of an industrial guaranteed bond may be found in the Armour and Co. (Delaware) first mortgage 5t's of 1943, which were guaranteed by Armour and Co. (Illinois), the holding company, both as to principal and interest. These bonds were retired at 105 in September, 1935; another example is found in the American I. G. Chemical Corporation convertible debenture 5t's of 1949, which are guaranteed as to principal and interest by I. G. Farbenindustrie Aktiengesellschaft.

[10] A third class of guarantor, not discussed here because it is outside the field of corporation finance, is the real estate mortgage bond guaranteed by a casualty insurance company or other "insurer." These guaranteed issues defaulted along with the great bulk of other real estate mortgage bonds in the period 1929-1933. The Federal Mutual Mortgage Insurance Fund has many points of similarity with this form of guarantee. The most important divergence is that, instead of being obligated to make immediate cash payment in the event of accruing liability as guarantor, the Federal Fund is permitted to issue its notes.

[11] "In 1867 and 1868 the Alabama legislature passed acts providing for state endorsement of railroad bonds. Under that authority endorsements were made for $19,006,000. Direct bonds amounting to $2,300,000 were sold by the state for railroad aid. Default occurred on both types of bond in aid of the Alabama and Chattanooga Railroad in 1872. The road had become bankrupt. In 1873 an act was passed providing for state bonds to be issued in place of

A guarantee may be indirect. The common method of obtaining this result is through a long-term lease by a second corporation of property belonging to the corporation issuing the bonds. A guarantee of the first, or direct, type is endorsed upon the bond at the, time of issue, whereas this second form may not appear upon the instrument, because the lease very usually occurs at some date after the creation of the bonds, and the guarantee may be only an incident of the lease. Guarantees are most commonly for both principal and interest, but the lessee of a property might regard himself as merely a tenant for a term of years and not as one in complete control for an indefinite period. If, in spite of the fact that the lease runs for a long term of years, the lessee adopts the attitude of a temporary tenant with responsibility only for a stipulated rental during the term, then the result would be a guarantee of interest only." Upon the maturing of such bonds, the holders would have to fall back on the responsibility of the issuing company and their lien." If the bondholders are to be assured of the full benefit of the lease, it should extend well beyond the maturity of the bonds and provide for a rental sufficient to insure both interest and eventual retirement of the bonds.

Leases of the type just described may represent merely an assumption of existing debt by a corporation desiring to obtain control of the property of another by a lease arrangement. Leases for a

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state-endorsed issues in the ratio of one for four. Wm. L. Raymond, *State and Municipal Bonds* (Boston: Financial Publishing Co., 1932), pp. 82-83.

An important current example of this type of guarantee obligation may be found in the bonds of the Canadian National Railway Company guaranteed by the Dominion of Canada. Thus, its 20-year 44 per cent guaranteed gold bonds maturing in 1951, while a direct obligation of the railway company, are also guaranteed unconditionally both as to principal and interest by the Dominion Government, and a copy of the guarantee is endorsed on each bond.

'Guarantees of principal only" are cited by Lawrence Chamberlain and G. W. Edwards, *Principles of Bond Investment* (New York: Henry Holt & Co., 1927), p. 85, and A. S. Dewing, *Financial Policy of Cori3orations* (New York: Ronald Press Co., rev. ed., 1926), p. 150, footnote p, but appear spurious. A part of the initial investment was to be deposited with an independent banking institution, which agreed to accumulate this sum at compound interest at what was formerly regarded as a modest and safe rate of interest, such as 34 or 4 per cent, until it equaled the principal sum at the maturity date. The depositary institution guaranteed the accumulation and so the "principal," and the debtor corporation was to pay the interest. Should the company fail before the maturity date, the bondholder would find that his "guarantee of principal" merely gave him recourse to that fraction of his investment which had been set aside for him, and therefore his principal was not guaranteed in the commonly understood sense. If safety of principal were as simply guaranteed as this, one would need only, after investing in gold bricks or other get-rich-quick ventures, to place an equal sum in a trust fund at 4 per cent. Then the principal would be "guaranteed"—at the end of 174 years. Fortunately such financial hocus-pocus is as rare as it is misleading. No reputable banking institution should lend itself to such a hoax.

" An example of guarantee of interest only by the Canadian Pacific Railway Company may be found in the first refunding 54's, Series B bonds of 1978 of the Minneapolis, St. Paul & Sault Ste. Marie Railway Company.

long period may be arranged, however, antecedent to the issue of the bonds in order to aid the sale of the issue. In this manner, a corporation might indirectly guarantee the bonds of a subsidiary. Whether or not such a guarantee adds to the strength of the bond depends upon whether it increases either the amount or the certainty of the income over what the property could rent for to other users, as in the case of an office building or a mercantile property.

Assumed bonds. While the term "assumed" might be applied in the broad and popular sense to mean any bond for which the responsibility has been assumed by another than the original debtor corporation, the financial vernacular usually restricts its use to bonds which have been assumed by some corporation as an incident to acquiring the properties of the debtor corporation. When the assets of a company are sold or a consolidation is effected, the successor corporation ordinarily assumes the debt as a part of the terms of sale instead of paying its debts at once. Or, when the properties of a business are sold in foreclosure, the property may be sold to the new company subject to the claims of certain bond issues, if there have been any which, by the regular payment of their interest, have been kept "undisturbed." The new company assumes these bonds as a necessary means of keeping title to the property mortgaged to secure them. The strength of assumed bonds will depend upon any lien which they may have originally possessed and the general credit of the assuming corporation. Unless otherwise provided for, a debenture of Corporation *A,* if assumed by Corporation *B* as the result of the latter's purchase of the assets of the former, would become the unsecured debt of the latter company. Hence its position might be either improved or weakened, depending upon the relative general credit standing of the two corporations.[14]

Joint bonds. Joint bonds are guaranteed obligations in which two or more guaran,tors liave joined. Their individual liability may be limited to some stated fraction of the total, thereby restricting the amount by which each is secondarily liable as a result of his guarantee. Such a limitation is most likely in the case of individual guarantees 61—difpup—of well=ta=do, large stockholders aiding the credit elf their corporation- -but nevertheless hesitating to risk their fortunes for the whole amount of the bond issue.

When the liability of each guarantor is unlimited, it is said to be "joint and several," and the issue becomes as strong as the strongest guarantor or guarantors, in addition to any strength which it may derive from any lien it holds. Such a joint and several guarantee is most likely to represent the common interest of two or more companies in certain jointly used facilities, such as terminals, belt-line

[14] See Chapter 24 for qualification of this rule and further discussion of the effects of merger and consolidation on various creditor groups.

facilities to permit traffic interchan e or unify entrance to a terminal, or bridges used by railroads.[15] Whenever any guarantor fails to carry his allotted share of the nancial burden, a usual penalty is the loss of the right to use the joint facilities. The importance of suitable terminal facilities has resulted in minal bonds of this sort enjoying a very high investment rating. In a similar manner, a group of very closely affiliated companies—especially if of modest size—might guarantee an issue of one of their group, in order to offer a maximum of credit strength.[16]

Receivers' certificates. In the emergency of a receivership, temporary financing may be essential to continued operation of a property. This situation is most frequently found in the case of public service corporations whose uninterrupted service is required by the public welfare. It is met by the expedient of receivers' certificates, which a receiver may issue when expressly authorized by the court from which he derives his authority. To make their sale possible these certificates may be made prior in rank to existing debts, even mortgage liens. In some instances receivers' certificates and receivers' debts have consumed the entire property, leaving nothing for the mortgage bondholders. Regarding this situation, Cook caustically remarks, "a natural result of courts engaging in the carrying on of business enterprises."[11]

Not only may ordinary expenses be provided for by this device, but also unusual maintenance may be carried on to restore the property to efficiency, or the receiver may even make necessary additions to the property, such as buying new rolling stock or completing an unfinished section of railroad. Such large powers to incur debt show the importance which the claims of receivers' certificates might conceivably have, although ordinarily they are for relatively small amounts.

The exact priority of a given issue of certificates is prescribed by the authorization of the court, and they may or may not be prior to all, other liens and subsequently issued receivers' certificates. If

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" Jointly and severally guaranteed obligations are illustrated by the bones issues of the Chicago Union Station, Cincinnati Union Terminal, Cleveland Union Terminal, Indianapolis Union Railway, St. Paul Union Depot, and the Washington (D. C.) Union Station. The Kansas City Terminal Railway 1st 4's of 1960 are guaranteed jointly and by an operating agreement which includes 12 railroads.

[16] The Edward Hines Western Pine Company issued (1921) the Edward Hines Associated Lumber Interests 6 per cent gold debentures, Series B, of 1931-1939, for $1,000,000. These bonds were jointly and severally guaranteed by the Edward Hines Lumber Co., Edward Hines Hardwood & Hemlock Company, Edward Hines Yellow Pine Trustees, Edward Hines Yellow Pine Company, and trustees of the Lumber Investment Association.

" W. W. Cook, *Principles of Corporation Law* (Ann Arbor: Lawyers Club, University of Michigan, 1925), p. 608. For a succinct statement of the legal position of receivers' certificates, see this reference, pp. 608-610.

the holders of an issue of mortgage bonds are not parties to the receivership because they are not in default, owing to the adequacy of earnings to cover their particular prior claims, they would not expect to be obliged to yield priority. The philosophy of the extraordinary priorities granted to receivers' certificates is that those parties, including usually the holders of at least some of the bond issues, should and must give way to a claim created by the receiver for the purpose of preserving their interests by bringing the property to reasonable efficiency. Rather than invest a further sum, the holders of a defaulted bond issue are willing to yield in rank to whoever will provide the needed funds by the purchase of receivers' certificates. Those parties, such as the holders of very strongly situated bonds whose position is quite adequately and obviously cared for by the property and earning power, so that they are undisturbed by the receivership, would not need to yield any ground to obligations created by the receiver primarily for the benefit of those more weakly situated.

Receivers' certificates, then, will have their rank determined by the order of the court but will always be subject to taxes, certain claims for wage payments, the receivers' costs and expenses, sometimes some very secure liens, and possibly prior issues of receivers' certificates. Successive issues of receivers' certificates may be kept on an equal plane of priority."

If the receivership is brought to a successful conclusion, these short-term certificates are paid off at that time, the necessary money being raised either by an assessment paid by the junior security holders, or, if the condition of the company warrants, by a sale of securities to the public. Occasionally funds may even be found in the business to liquidate these usually minor claims. While receivers' certificates have a position which is strong legally, they are the result of an unusual embarrassment and the product of the court's rule, and so in practice their payment may be subject to delay and default.

Special Types of Bonds

Convertible and participating bonds. Since the nature of both conversion and participating features has been explained already in their relation to preferred stocks, their similar effect in relation to bonds does not require repetition here." Both features offer a possible opportunity to the bondholder to share in the prosperity of the corporation beyond the fixed claim of the ordinary bond. Participating bonds are almost never used, occupying the anomalous

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"For further discussion of receivers' powers and receivers' certificates, see Chapter 27.

[18] See pp. 99-100.

position of a bond with a varying return over and above the stipulated fixed interest once the participation becomes effective. Two types of commitment are really combined in a single instrument—the bond factor, appealing to investment demand, and the participating feature, appealing to the more speculative type, which prefers stocks. Better results, at least from the standpoint of the corporation, are likely to be obtained from the offering of a unit or block consisting of two securities which separate these characteristics, or from an offering of convertible bonds.[20] The latter alternative accomplishes the desired end from the buyer's point of view and yet has the advantage, when the bondholder converts into stock in order to reap the larger return, of removing the bonds and their attendant fixed charges. Should the holder of a convertible bond not care to assume the risks of stock ownership at that time, he can realize his profit by selling at a price which will reflect the advantage of the conversion privilege and reinvest his increased capital in other bonds. The participating bondholder, once his income has increased as the result of participation, can likewise sell and reinvest in order to insure a constant return upon the increased value of his capital, but the corporation, while sharing income in the same manner that it did with the convertible bond, does not enjoy the release from debt and the simplification of capital structure that it did under the conversion arrangement.

Bonds with a feature of this sort are most frequently of the weaker, or at least second-grade, variety. The privilege balances the weakness by the compensating hope of future profit. This relation explains why convertible bonds are more frequently debenture than mortgage bonds.[21] Sometimes, however, a very strongly

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[20] On a few unusual occasions, convertibility has been into some security other than common stock. In 1923 the Monongahela West Penn Public Service offered five-year 6 per cent bonds convertible into thirty-year 51 per cent bonds on a sliding scale. Both bonds were to have like security, the first being Series A and the second being Series B of its first lien and refunding gold bonds. The first $2,000,000 of Series A 6's presented for conversion were given credit for an amount equal to par to apply on an equal par amount of the Series B 5Y2's, which were to be bought at a price that would yield 6 per cent—that is, at a price ranging from 93.12 in 1923 to 93.51 in 1928. The company agreed to pay any balance of credit in cash to the converting bondholder. The next $1,500,000 of converted bonds exercised their privilege on a 5.90 per cent yield basis, and the remainder on a 5.75 per cent basis—that is, paying a somewhat higher price.

In 1932 the Columbus Railway, Power and Light Company issued $4,500,000 secured gold 5t's of 1942, convertible into a like principal amount of first and refunding 5's of 1962 plus $40 in cash per $1,000 bond. None were converted, and the issue was retired in 1935 at 105.

[21] "Thus, in a random selection of 152 major convertible industrial issues, 104 (or 68 per cent) were debentures, 34 were first mortgages, and 14 had either junior mortgage or collateral trust security. Among 67 public utility convertible issues, 49 (or 73 per cent) were debentures, 9 were first mortgages, and 9 had either junior mortgage or collateral trust security.

situated company employs the device in order to sell its bonds at a better price, especially when the bond market is temporarily weak.[22]

Bonds with warrants. Another • • i s • ha II- -ra-used-o-s--- casionally in recent years And which is akin in nature to the convertib is-thebond with warrants attached we give the ii31 deT the-right-tiipurchase common stock at specified prices. The named prIce or piTces will be higher than the market price current at the time the bond is sold. The privilege constitutes a call upon the future prosperity of the company, and its value will depend upon the hope that the market price of the stock will rise above the stipulated subscription price before the right expires.

Generally the warrants are nondetachable, which means merely that they may be separated from the bond only when the bondholder wishes to exercise the right of purchase. Detachable warrants have the advantage to the bondholder that they may be separated and sold as separate instruments whenever the holder chooses to cash in on their value and may be kept even after the bond itself has been called for redemption. The nondetachable type has the advantage from the corporation's point of view that it may be canceled if the holder does not find it advantageous to exercise the right prior to redemption.

In comparing the bond with warrants and the convertible bond, the corporation finds the former advantageous in that, if the warrant is exercised, it receives for the newly created stock cash which it can use for expansion, or, if no need exists, bonds can be retired by call; the bondholder finds it possibly advantageous in that he may be able to cash in on the warrant without surrendering his bond at that point of time when high earnings make continued holding desirable.

Nature and advantages of income bonds. Income bonds are an exception to the general definition of bonds and so bring despair to those who like a clear-cut classificatory system. While they are bonds in name, and at law, the interest on them is contingent_upon- - -,earninits and may require a declaration by the board of directors, -very muCh W,fter the manner of preferred stock. As in the case of such Atock, the income may or may not be cumulative. Unlike stock, these bonds ordinarily have a maturity date and quite generally a mortgage lien, although often a junior one. Since failure to pay interest does not constitute default and an occasion for foreclosure, the mortgage is of value only in determining rank in case of

[22] In 1928 and 1929, at a time when the bond market was weak but the stock market was extremely buoyant, the Atchison, Topeka & Santa Fe Railway Co. and the American Telephone and Telegraph Co. issued convertible bonds, with the right to convert at a price considerably below the going market price, but the privilege was not to become operative until some time later.

default in principal at maturity or in the event of insolvency caused by failure to meet other obligations. It may also preserve priority in case of later junior issues unless the indenture permits prior issues. Perhaps the chief difference in practice between the income bond and the preferred stock is that the indenture of the former is usually drawn so strictly that directors are required to declare an interest payment whenever earnings are shown, while the declaration of preferred dividends lies within the discretion of the board.

Such a weak form of bond is usually the result of a reor in which bondholders have teen otliiCd to make sacrifices._ cause of this origin the title "adjustment" is sometimes used rather than "income," partly, no doubt, because of the unpleaaant association which the latter has. The compulsion of circumstances at such a time explains the acceptance of such a weak instrument by the investor. A preferred stock would represent a more straightforward treatment of the situation, but the name "bond" seems to provide a certain solace. And those who would steer a successful course in resolving the conflicting interests in a reorganization are apt to accept any compromise in form which will aid in the realization of the desired results, in this case substitution of contingent for too heavy fixed charges. The attitude of the market is important because it determines the value to be attributed to the securities, and the managers of the reorganization owe it to the security holders to select a capital structure that will maximize the value of their holdings in so far as that course is consonant with the long-run well-being of the corporation.

A second reason for the use of income bonds appears in reorganization when the old bonds which were formerly outstanding and are to be exchanged have been held by regulated investment institutions, such as life insurance companies. These latter companies, in order to comply with the laws regulating their investments, in some states would be obliged to sell any preferred stock acquired in the reorganized company within five years, possibly at a great sacrifice, while income bonds could be held indefinitely if that course seemed likely to yield a greater profit.

A third, and more easily measured, advantage of the income bond over a preferred stock is that the interest on the former is a deduction which is prior to the Federal income tax, whereas the dividends on the latter are payable only out of the balance after income taxes. In years in which earnings are low this difference will mean that the saving in taxes effected by the income bond may increase the payment over what could be paid to a preferred stock of similar character. Thus, in the illustration below, in the poor year when only $500,000 was left over after expenses and fixed charges, a $10,000,000

issue of 5 per cent income bonds would show interest earned in full, while a similar issue of 5 per cent preferred would find only $425,000 available after a 15 per cent income tax is deducted, or 4.25 per cent instead of 5 per cent on $10,000,000. In a year with better earnings, when the balance after operating expenses and fixed charges was $1,000,000, a sufficient sum would be available to cover either income bond interest or preferred stock dividend in full. Because of the income tax saving, however, the former would show a higher margin of safety and would result in a larger balance being left over for the common stock.

	Poor'Y ear	*Good Year*
A. With Income Bonds Outstanding		
Balance after operating expenses and fixed charges	$500,000	$1,000,000
Interest on 5% income bonds	500,000	500,000
Balance	0	$ 500,000
Federal income tax at 15%	0	75,000
Balance for common stock	0	$ 425,000
B. With Preferred Stock Outstanding		
Balance after orating expenses and fixed charges	$500,000	$1,000,000
Federal income tax at 15%	75,000	150,000
Available for preferred dividends	$425,000	$ 850,000
Preferred dividends at 5%	500,000	500,000
Balance for common stock	$ 75,000 (def.)	$ 350,000

Under ordinary conditions such tax savings through the use of income bonds might be less important than the avoidance of so much funded debt in the capital structure, but, when conditions are unsatisfactory, this tax consideration requires more weight. Especially is this true when a public service corporation is involved, because earnings are limited by regulation, so that such savings appear correspondingly more important.

Disadvantages of income bonds. The chief objection to income bonds as compared with preferred stocks lies in the fact that the former are not suitable as an instrument for sale to the public in the event orsi nandiig: A 61a of security is created that does not lend itself to eipanSion. Investment bankers would hesitate to sell this peculiar form of bond, since it might give rise to misunderstanding among less informed buyers, and such bonds would not sell in the prime bond market unless they were backed by a very strong corporation. A strong company would avoid giving such an unnecessarily weak claim that would cost more in interest than a

regular fixed charge. Weaker corporations, unable to incur debt and the usual fixed charges, have found it more logical and straightforward to use preferred stocks to raise funds upon a contingent charge basis—logical because the buyers of stocks are more ready to accept the implied risk than the usual bond buyers, and straightforward because there is less likelihood of misunderstanding of the contingent nature of the income if the instrument is not called a bond.

The character of an income bond is determined wholly by the terms of the instrument. In the absence of direct fraud and while acting within these terms, the directors of the corporation are given considerable latitude by the courts in deciding whether the interest can be paid in a given year. The question sometimes becomes a matter of litigation because the directors are interested primarily in building up the corporation and its ultimate credit, while the holders of income bonds are concerned with the collection of their interest as quickly as possible. In the case of the Texas & Pacific Railway Company second mortgage 5 per cent noncumulative income bonds, it was held that interest was payable only at the discretion of the directors, who might, if they saw fit, apply earning otherwise available to income bond interest to capital expenditurs—that is, actual additions to the property.[23] The more common arrangement is to require payment to the extent the interest is earned—ordinarily to the nearest one-half per cent fully earned.[24]

Even though the indenture specifically requires the payment of interest "whenever earned," accounting questions arise which make

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Missouri- Pacific Railroad Co. v. Texas & Pacific Railway Co., 282 Fed. 61 (1922). The claim of the Missouri Pacific was for about twenty years' back interest on the $23,700,000 bonds owned by it. The decision of the lower court emphasized the long delay in seeking redress. The court said in part: "For twenty-seven years the construction of the Texas & Pacific Board was accepted without comment or objection. Their action each year was notorious. On the faith of the silence of the income bondholders and the trustee from year to year, expenditures were made that never can be recalled. Necessarily the annual statements of the Texas & Pacific reflected these expenditures for improvements and betterments. No doubt stock and first mortgage bonds changed hands because of them. To allow the claim of the intervenor now for interest would wipe out entirely the capital stock of the Texas & Pacific Railway. The public, if no one else, is entitled to be protected against any such startling change of front as is now attempted by the Missouri Pacific." *Commercial and Financial Chronicle,* August 20, 1921, p. 849.

An appeal from this decision was dismissed by the U. S. Circuit Court of Appeals in June, 1922. The 5 per cent income bonds referred to were exchanged for 5 per cent noncumulative preferred stock in the reorganization of 1924.

The most frequent use of the income bond in the 1930's was in real estate mortgage bond reorganizations, where interest was generally payable from net earnings *before depreciation* but after any sinking fund for prior liens and after allowing directors to appropriate limited sums for replacements and improvements.

the exact definition of earnings difficult. The dividing line between ordinary repairs, which are legitimate deductions as expense items, and improvements, which are not expense, is often hard to- define, although most indentures nowadays make an attempt. Even authorities differ as to the amount which should be allowed for depreciation of various kinds of property. The management may even be allowed to make charges against income for reserves which would materially reduce apparent earnings for income bond interest. In spite of all these difficulties, once a corporation has recovered from the trouble which gave rise to the income bond, its prosperity and earnings may be such as to give the bond good standing, and the conservatism of the directors in the early years may prove to be an important element in creating the re-established credit. [25]

Bond Retirement Features

Sinking fund bonds. When, as in the case of some of the public service industries, a business unit seems to have a permanent place in the economy of the community, the debt may be regarded as a continuing one, and no steps may be taken to reduce it or provide for its elimination.[26] The expectation is that, as such a debt

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25 The problem of the income bond is discussed in its relation to reorganizations in Chapter 28.

Some important examples of income bonds which have returned interest in full in some years are the following:

Issue	*Year of Issue*	*Payments*
Atchison, Topeka & Sante Fe Railway Co. adjustment gold 4's of 1995	1895	In full to date.
Missouri-Kansas-Texas Railroad Co. cum. adjust. mort. 6's of 1967	1922	In full 1922-1934, none thereafter.
International Great Northern adjust. gold 6's of 1952	1922	4% in 1924, full rate 1928-1930, none thereafter.
Chicago, Milwaukee, St. Paul & Pacific Railroad Co. cony. adjust. 5's of 2000 (noncumulative until 1930)	1925	11-% in 1927, 21% in 1928, 5t% in 1929, 4% in 1930, none thereafter.

" The question of debt retirement of public service corporations is considered more fully on p. 267.

Occasionally, when financing is extremely difficult because of adverse general economic conditions, a sinking fund might be required by even a public utility to facilitate sale. In 1932, the Kansas Power and Light Company first and refunding mortgage, Series C, 6's of 1947 were offered at 911 to yield over 6.90 per cent. In addition to an improvement fund clause in the mortgage, providing that an amount equal to 21 per cent of property against which the bonds were issued should be set aside for replacements, additions, or sinking fund, a special supplemental indenture covenanted that monthly deposits of $42,000 should be made, a sum sufficient to retire the entire series by maturity.

The earnings figures indicated a situation in which a sinking fund would not be expected in ordinary times. The latest earnings reported were for the

matures, it will be refunded by the sale of new bonds. When the long-run future of a business is uncertain, as it ordinarily is in competitive lines, or when the youth of the industry does not permit assured prediction of its future, or when the debt is more than a conservative amount, it behooves the corporation to reduce, if not wholly eliminate, its bonds by the date of final maturity. Should the property be of the type which does not lend itself to constant renewal but is inevitably depleted or depreciated with the passage of time, then definite measures for debt reduction are absolutely essentia1.[27] All these reasons for debt reduction are justified by sound corporate policy but are also required by the demands of the bond-buying public. Looking at debt reduction in the narrowest terms, the corporation sees it as a confidence-inspiring device to establish an increased credit standing and as a means of preventing embarrassment upon the occasion of refunding at maturity. The microscopic proportions of a few sinking funds suggest that the very name in a bond title is expected to be enough to charm the prospective investor.[28]

Two methods, the sinking fund and the serial bond, allow the corporation to give the bondholders definite assurank of debt reduction. A sinking fund is created by the regular setting Auricle of certain sums by the corporation, ordinarily p did u1 176 tIre truffee of the issue, in order to "sink" the debt. Some would restrict the term toa fund of investments accumulated during the life of the bonds to be converted into cash at their maturity for the purpose of retirement. But the generally accepted usage is to apply the term likewise to

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12 months ended November 30, 1931, and were substantially higher than those of the preceding year.

Gross Earnings		$9,938,086
Operative Expenses, Maintenance, and Taxes (except Federal income taxes)		5,371,424
Net Earnings (before depreciation)		$4,566,662
Annual Charges on This Issue and Other Series, Including Underlying Issues	$1,618,398	
Series C Bonds Retired Annually	504,000	2,122,398
Balance		$2,444,264

[27] A special case is property that has an economic life less than its natural physical life because its usefulness ceases with the exhaustion of some other property. Thus a pipe line loses all but scrap value with the exhaustion of the supply of oil or natural gas. The tangible property of the Memphis Natural Gas Company consisted solely of pipe lines and compressor and meter stations when it issued its first mortgage 6 per cent five-year sinking fund bonds of 1937. The sinking fund provided for complete retirement during the life of the issue, a much shorter period than the probable life of natural gas wells of the United Gas Public Service Company, from which gas was purchased under a long-term contract.

[28] Thus, the Southern Pacific Company San Francisco Terminal first gold 4's of 1950, originally issued in 1910 and 1912 to the amount of $25,000,000, provide for an annual sinking fund of $5,000.

the customary method of using the cash, as it is set aside, to purchase and retire bonds of the issue itself, so that no "fund" is interposed between the acts of setting the money aside and retiring the bonds.

Because of the hazards attending the investment of any fund, even in very high-grade securities, the almost universal present-day practice is to require that any sinking fund cash be used for the immediate purchase of the bonds being protected. Even the choicest government bonds may fluctuate considerably in market price, and, if it should be necessary to sell upon the occasion of maturity in order to convert the investments into cash, a loss might be the result. Whenever the investment of sinking fund cash in bonds other than those of the issue itself is permitted, commitments should be restricted to investments which are not only high grade btit which mature on or before the maturity date of the protected issue, so that there will be no dependence upon the price vagaries of the bond market.

If a corporation were required to purchase its own bonds, and sellers were few, an exorbitantly high price might be the result. To prevent this, sinking fund bonds are normally callable, and the company is given the option either of buying in the market or of calling the bonds needed for redemption. As long as the bonds may be bought in the open market at or below the call price, the company will fill its requirements there. Not only does this represent an economy, but it is in the interest of the bondholders, since it provides an improved market for those who are desirous of selling and leaves undisturbed the holdings of those who wish to retain their investment. Because the credit standing of a corporation is judged in part by the market performance of its securities, the artificial support of sinking fund purchases is a helpful influence, especially in the case of small companies whose bonds are not readily marketable.

Actual purchases may be made by the trustee rather than the company, the proper amounts being paid over in cash to the former by the latter. When less than an entire issue of bonds is to be called, the particular bonds are selected by lot. The serial numbers of these bonds are then published by advertisement in the case of coupon bonds; holders of registered bonds are notified by mail. The company may not be required to deposit cash but may be given the option of making payments to the trustee in bonds. This alternative enables the corporation to use any surplus cash to make purchases when the bonds seem cheap, and so presumably in need of buying support, or when, as a matter of conservatism, it wishes to accumulate bonds to meet future sinking fund requirements.

On rare occasions a corporation is required to repurchase its bonds by call at a substantial premium regardless of market price. The

double purpose of such an agreement is to raise the yield to the investor while keeping down the nominal, or coupon, rate, and to add what amounts to a lottery feature.[29] The possibility of a lucky profit is created for those whose bonds are called at a substantial excess over the market price at the time of call. Thus, the Kelly-Springfield Tire Company's 8 per cent sinking fund gold notes of 1931 were issued in 1921 to the amount of $10,000,000 at a price of 992. Each half year throughout the life of the bonds $500,000 (face amount) were to be called by lot at 110. The unredeemed balance was finally called prior to maturity in 1929, the purchase being financed from the proceeds of the sale of common stock."

In an opposite manner, when a bond issue promises to be particularly attractive and the sinking fund is not deemed essential to safety, the agreement may be that the bond shall be noncallable and, if the trustee is unable to purchase bonds at or below a given price, the fund shall be returned to the corporation.

Varieties of sinking funds. Sinking funds may be classified according to the manner in which the annual amounts are determined. Such a classification would read as follows:

1. Fixed annual amounts. The fixed amount may be a certain face amount of bonds or a certain amount in dollars to be paid to the trustee. The former is more usual, and its final effect is definite. Should the latter arrangement be used, it might be stated as an amount of money, such as $200,000, with a qualifying clause that an additional sum should be paid whenever more was required because of the necessity of purchasing the bonds at a premium. The qualification would insure a minimum purchase of $200,000 face amount.

"Legally, the possible profit which might inure from call by lot at a price in excess of market price would not be held a "lottery profit." At the time of issue the future market price at the time of redemption is unknown. Practically, such rare gains are utterly insignificant beside the numerous and substantial losses, actuarially speaking, when corporations call in their bonds and refund them into issues with much lower yields. The imputed actuarial loss would be the excess of the market value of the called bond issue had there been no call feature over the value at call price.

"Similarly, the Goodyear Tire & Rubber Co., at the time of its reorganization in 1921, issued first mortgage 8 per cent bonds, which were to be drawn for sinking fund at 120, and debenture 8 per cent bonds, which were to be drawn at 110. Any debentures not retired by maturity were to be paid at the call price. The unredeemed balances of these two issues were refunded through the sale of first mortgage and collateral trust 5's in 1927.

Some European governments have employed the lottery on a large scale in their bond issues, redeeming a few bonds each year at a number of times their face value. These golden prizes, when compared to the total issue involved, do not increase the cost of the loan to the government greatly, doubtless reducing it when allowance is made for the higher price obtained because of the lottery inducement. Such lottery features have generally been regarded as illegal in this country.

Sometimes, instead of being stated in dollars, the sinking fund payment is stated as a percentage of the bonds issued. This method is useful when the bond issue is open-end and the sinking fund is to be made applicable to all series, present and future.

If the annual sinking fund payments are equal and the interest charges decrease as the debt is retired, the total annual burden will grow less. In this way the heaviest load is placed upon the initial years. The annual reduction in the drain upon cash will amount to the saving in interest upon bonds retired. As a result, the corporation is able to increase dividends by that amount annually, which is especially appropriate in most cases because the sinking fund represents earnings withheld for the purpose of debt retirement. The stockholders' investment gradually replaces the investment of the bondholders. The reward for this additional investment can be reflected in immediate expansion of dividend disbursements as interest charges are reduced. In contrast, under the plan mentioned under 2 (a) (4) below, where the bonds are kept alive in the sinking fund and the interest saving is utilized to increase the sinking fund, the stockholder could realize no cash distribution until the debt was wholly retired, a process which might require a very long period.

2. *Variable annual amounts.* (a) *Increasing each year.* The payments may be scaled so as to increase each year because it is believed that the ability of the company to retire its debt will grow as a result of (1) expanding earnings as the additional capital is utilized, (2) the more complete development of the potential market, (3) ordinary growth from retained earnings, or (4) the reduction of interest charges as the debt itself diminishes. If the last factor is the sole influence relied upon, a simple device is the retention rather than cancellation of bonds purchased for the sinking fund by the trustee. The trustee then collects the interest on these sinking fund bonds for the use of the fund. In this way the company pays a constant annual amount for interest and sinking fund, but the growing sum collected by the trustee as interest on repurchased bonds permits ever-increasing purchases.

(b) *Decreasing each year.* While decreasing sinking funds are unusual, a situation might arise where the primary purpose is to reduce an excessive debt as soon as possible to more modest proportions, after which the reduction could be carried on at a more leisurely pace. Such a method would have the advantage of placing the heaviest burden on the near-term future, which is always more predictable and certain than the more distant future.[31] The

" While decreasing by longer stages than one year, the Market Street Railway first 7's of 1940 illustrate the general principle. Upon issuance in 1924, the company covenanted to provide an annual sinking fund of $500,000 from January 1, 1925, through 1932, the bonds purchased to be kept alive until January 1, 1933. These bonds were to be canceled on the latter date, and an

prospects might even point to a declining earnings trend.

(c) *Fluctuating sums.* Since the sinking fund is ordinarily a charge which must be met in order to avoid insolvency, some basis which will permit the annual payment to fluctuate with the ability to pay. A very reasonable method is to vary the payment in relation to the balance of earnings after all expenses, including the interest charges, have been met. If any preferred dividends were to be paid and their payment was regarded as essential to the company's credit, the balance after that item is deducted might be used as the basis instead. In order to avoid a complete failure of sinking fund contributions, a fixed annual minimum, below which the fluctuating annual amount is not allowed to fall, is usually stated.[32] Other bases, such as sales, have been used, but these are less logical because they are less direct measures of ability to pay.

When the property is exhaustible, another method is to vary the sinking fund allowances according to the rate of depletion. Thus, while a minimum is ordinarily stated, additional sums are required to be paid into the sinking fund when more than a certain number of tons of ore are removed from a mineral property, more than a certain number of barrels of oil are taken from a petroleum well, or more than a certain number of feet of lumber are cut from timber acreage.[33] Since the amount of original property given as security is a known amount, the sinking fund can be arranged to retire the bonds considerably in advance of the depletion of the property.

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annual sinking fund of $300,000 was to be paid in and accumulated thereafter until maturity for the purchase or redemption of the bonds. Bonds in the fund were to be kept alive, and the interest on them was to be added to the fund. The uncertain outlook for traction companies at the time of this financing, which was a refunding operation, explains the sinking fund arrangement.

[32] The Goodyear Tire & Rubber Co., the nature of whose business makes fluctuating earnings inevitable, has a purchase fund for its first mortgage and collateral trust 5's of 1957 of $600,000 per year (one per cent on the $60,000,000 total) or 10 per cent of the consolidated net earnings for the preceding fiscal year after allowance for preferred dividends, whichever is greater, to purchase bonds at not exceeding 100 and accrued interest. Any unexpended balance due to inability to purchase at that price reverts periodically to the company.

" Truax-Traer Coal Company convertible debenture gold 6's of 1943 were given a sinking fund of 71- cents per ton of coal mined and sold, with minimum annual payments ranging from $150,000 in 1929 to $262,500 in 1943, which were estimated to be sufficient to retire the entire issue by maturity.

International Agricultural Corporation first and collateral trust gold 5's of 1942 provided sinking fund payments amounting to 2i per cent per annum beginning in 1929 and 5 per cent beginning in 1937, plus 20 cents per ton for any phosphate rock mined in excess of 1,000,000 tons in any calendar year.

The Bloedell-Donovan Lumber Mills 6 per cent gold notes, dated February 1, 1929, were arranged to mature serially in 1933-1936 but provided a sinking fund of $1 per thousand feet in excess of 100,000,000 feet cut from its own timber in any calendar year to be used for retirement of outstanding notes of longest maturity if not used for purchase of additional timber.

Although the sinking fund is sometimes enriched by proceeds from the sale of property subject to the mortgage, such a windfall can hardly be regarded as true sinking fund. Even when bonds have no sinking fund at all, monies from the sale of pledged property should be required to be applied to the debt itself or prior lien debts, or to be used to acquire other suitable income-producing property.

In some cases the company is permitted to divert its payments to making improvements or to the acquisition of new property, on the theory that the position of the bonds is as much improved by additions to the assets as by the reduction of the debt which it secures. Such a provision is not objectionable when the primary purpose is to maintain the ratio of security to debt rather than to eliminate the debt. Public service corporations are the most frequent users of such a clause, since with them added property is the most certain to result in greater earning power and investment values, and their debt is a more permanent feature of their capital structure.

Such payments for improvements do not, however, reduce debt, and so are not sinking fund at all. Moreover, a dollar applied in this manner does not increase the degree of safety at as rapid a rate as when it is applied in true sinking fund fashion. Thus, a corporation with a. $10,000,000 property and a $6,000,000, or 60 per cent, funded debt, by applying $1,000,000 to property additions, would reduce its debt ratio to 55 per cent ($6,000,000±$11,000,000), whereas the same amount applied to the sinking fund would reduce that ratio to 50 per cent ($5,000,000±$10,000,000).[34] The earning power of added assets might, however, exceed the possible savings in interest charges by such a considerable margin as to make asset expansion more favorable to the credit of the corporation than bond retirement, because the bond market is often more concerned with the number of times the interest is earned than with the debt-asset ratio.

Serial bonds. A serial bond issue is one in which some of the bonds are ma ę tti mą'ture each or half year, instead of all on a sing e ate." Purchasersare offered a variety of maturities to suit `th ttrvarious needs. Definite amounts falling due each year give an inflexibility that may be avoided by a fluctuating sinking fund plan. Such an unbending requirement may mean that the corporation believes its income to be highly predictable. Because income from the rental of real estate is more stable from year to year than it is for most industrials, serial maturities have been common in real estate financing. Or the explanation may lie in the steady advance of depreciation of the property pledged, requiring an equally

[34] See C. W. Gerstenberg, *Financial Organization and Management* (New York: Prentice-Hall, Inc., 2nd rev. ed., 1939), p. 301, for a graphic illustration.

" "Serial bonds" should not be confused with the "serial numbers" which appear on all bonds as a means of identifying the different certificates of an issue (see p. 108).

steady retirement of the debt, as in the case of the equipment trust certificate. These two fields of use are the only ones in corporation finance where serial bonds are at all common, and in them it is almost invariably found. In large real estate issues only a partial reduction in the amount of debt during the life of the bonds has ordinarily been sought; with equipment trust certificates, complete elimination of the debt is accomplished.

Comparison of sinking fund and serial bonds. A comparison of the sinking fund and the serial bond from the standpoint of the corporation reveals certain differences. First the serial _bond- gives the purchaser a more certain maturity, presumably one which fits his needs exactly, which may result in lowering biter-es ts in_ periods when short-term investments are at a premium. The operation of the sinking fund, on the other hand, makes it uncertain as to just when a particular bond may be paid off. Some buyers, such as the commercial banks, appreciate a definitely short maturity for their investments. Sometimes, when short-term money is lending at a much lower rate than long-term money, the corporation will be able to borrow at a lower average cost by issuing serial bonds, which will include some short maturities, than by issuing sinking fund bonds with a single medium or long-term maturity.

In the second place, the sinking fund purchases provide an artificial market support which tends to improve the marketable quality of the bonds and so their investment attractiveness. Sometimes these purchases drive the price up to the call figure and hold it there. Such a supporting factor is most valuable for small, inactive bond issues, which might otherwise suffer a more fluctuating market —a disadvantage to bondholders needing to recover their principal before maturity. The bond house which is called upon to provide a market for its issues as a service to its customers and finds its greatest problem in small issues will appreciate this aspect of the sinking fund. The serial arrangement, on the other hand, merely provides for payment of those bonds maturing each period and so plays no direct part in the open market."

A third difference is the uncertainty in the price at which sinking fund redemptions will be made as compared with the uniform payment at par of the maturing serial bonds. If the bond market is

" The argument is even advanced that the marketability of the serial bond is reduced by quotation difficulties. Because of the variety of maturities, different prices for each are almost certain to exist even though all sell on the same yield basis. Thus, to yield 5 per cent, a 4 per cent bond maturing in one year would sell at 99.04, a similar two-year bond would sell at 98.12, a three-year bond would sell at 97.25, and so forth. At times the preferences of investors may be such as to cause differences in yields. As a consequence of these differences among maturities a sale of bonds of one maturity at a given price cannot be used to show the state of the market for all of the issue as it would in the case of ordinary bonds. Because of this difficulty serial bonds, except when they are selling at par, are very often quoted on a yield basis rather than a price basis. For example, a bond would be quoted

high or the credit of the debtor corporation is improved as compared with the situation at the time of issue, it may be necessary to pay a premium, usually a small one, to acquire the bonds needed for the sinking fund. On the other hand, if bond market conditions are bad, the price of the bonds may be low and permit the debtor corporation to realize considerable profits from the purchase of its bonds at a discount.

A fourth important difference, already mentioned, is the possible flexibility of the sinking fund plan as compared with the rigidity of a prearranged program of serial maturities. This point is of prime importance to corporations with fluctuating earnings.

A final difference that has to do with the relative certainty of debt reduction under the two plans may be mentioned in concluding, although it is of more importance to the investor than to the corporation. Theoretically both are on a par; under most indentures failure to meet a sinking fund payment is as much an act of default as failure to pay a maturing bond. As a practical matter, however, payments to the sinking fund are not the immediate concern of any particular bondholder, as a maturing bond would be, and, if the trustee takes no action, a sinking fund default may occur without any notice, or at least any action, being taken. And, while no corporation could rely upon such leniency, bondholders might hesitate to take steps which might cause them further trouble by plunging the debtor corporation into admitted insolvency. The danger of such inaction is that the corporation and its property are thereby permitted to drift still further along the road of depreciation to ruin. Such an oversight is unlikely to occur when a large corporation is the debtor, but it does constitute an argument for the serial maturity feature in small issues.[37]

Conclusion

In order to prevent too great a departure from realities, this and the preceding chapters which describe the various kinds of stocks and bonds have often indicated the use and the underlying motivation along with the definition. Such a longer statement will have the advantage of eliminating a good many excursions from the main thread of the story as the plans and standards of financing of the various kinds of businesses and situations are taken up. A knowledge of the tools of finance—that is, of stocks and bonds—is a necessary basis for understanding the ensuing discussion.

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as selling on a 4.70 per cent yield basis rather than at a price of 961. Quotation problems of this nature are not likely to be a major factor in determining marketability.

[37] The carelessness and downright mismanagement with which sinking funds have been administered by some municipalities has been the major factor causing a wholesale shift to the use of the serial maturity in the field of municipal finance.

CHAPTER 9

FACTORS DETERMINING THE FORM OF CAPITAL STRUCTURE

Conditioning Factors

WITH a knowledge of the various kinds of securities used in financing a corporation behind us, we are prepared to discuss how they are put together in the form of capital structures for actual business. But, if our study of corporation finance is to be an examination of essentials, rather than a mere running description of various practices, the underlying conditioning factors which are the setting of this problem must be constantly emphasized. Finance is not a science but rather one aspect of business. Business is an art, drawing much from the sciences, particularly economics, just as the art of agriculture employs the science of botany, and the art of mining employs geology. To continue the analogy, oertain financial forms and practices are especially fitted for certain businesses and for certain situations, just as certain types of plant life are particularly adapted to certain kinds of physical environment. Plants do stray from their customary associations, and for a time pass the test of survival; likewise financial practices are found in situations for which they are unsuited. But success in both fields is a process of continually meeting the requirements of the environment.

Before considering what is suitable as a financial plan for the capital structure (including retained earnings as well as stocks and bonds) of the various types of business, the conditioning factors should receive attention. They may be divided into internal factors and external factors.

Internal factors. Internal factors are those growing out of the nature of the business itself.

1. *Amount of funds required initially.* In those kinds of business which require large sums at the very outset, an appeal to the capital markets becomes almost inevitable. Certain other businesses, notably those which render personal services, require but very small amounts, so that many individuals of limited means are financially able to launch enterprises. Furthermore, the greater the need to raise a single large sum at the outset, the more likely

is the corporation to use a variety of instruments in order to appeal to all of the different sources of investment funds. If only a small amount is required, it is likely that a simple arrangement, involving only a single form of security will be used.

2. *Rapidity of growth.* If, after the initial financing, possibilities of growth are considerable, policies must be adopted that will facilitate the raising of adequate funds. Ordinarily the rate of growth is greatest at the beginning of the business life, gradually diminishing as the market's "saturation point" is approached. However, the sudden unfolding of opportunities in new directions may from time to time create expansion problems for an aggressive and energetically managed business. In general, the ral2idly growing business will bejnore likely to issue securities; slow growth is rediiiTyfina,nced out ofearnings. Among the faster growing corpnrations,-those with the greatest need for funds are the most likely to use a variety of securities in order to make the broadest appeal to different types of investors.

3. *"Turnover" of operating assets.* The ratio of the sales for a year to the average amount invested in The Tefal Arig Tssets is spoken of as the *F6Jerating asset tuiiidDer.*[1] The operating assets include the fixed assets Algal in operation, such as land and buildings, equipment, tools, and fixtures, and the current assets, such as inventories, receivables owed by customers, and cash balances. Nonoperating assets, such as investments, advances to other corporations, and intangibles, like goodwill, are excluded. In a business where virtually all of the assets are of the operating type and the amount of current liabilities is negligible, the operating asset investment and the sum of the bonds and net worth will be substantially the same amount.

Other things being the same, the greater the sales volume with a given amount of operating investment, the greater is the return for the owners of that investment. But some lines of business characteristically employ large amounts of assets in proportion to their volume of business. An electric light and power company might invest five dollars for every dollar of annual sales and so show an operating asset turnover of but one fifth, as compared with some merchandising concern that might have a ratio of five. It follows naturally that a much larger percentage of the sales dollar of the

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[1] Because of this frequently substantial equivalence between operating assets and investment by stock and bond holders, sales are often compared with the latter figure to obtain what is termed *invested capital turnover.* Meaningless results are obtained whenever a substantial amount is invested in nonoperating assets, which mean a larger "invested capital" that bears no relationship to sales. Similarly, the business may be carried on with short-term funds obtained from banks or merchants, so that "invested capital" is made to appear low in relation to sales.

former must be left over after operating expenses as return upon investment in order to provide a return equal to that of the concern having the higher turnover. If 40 cents of the electric utility sales dollar remains as return upon investment, the rate will be but 8 per cent, whereas a balance of 1.6 cents per dollar of sales would produce an equal percentage of return for the hypothetical merchandising concern. Small changes in the ratio of expenses to sales, or operating ratio, of two such different situations result in quite different effects upon the rate of return upon investment, businesses with a low turnover being little affected and those with a high turnover being greatly affected. In the case just cited, an increase in the net income margin of 1 per cent would increase the rate of return upon investment from 8 per cent to 8.20 per cent for the utility and to 13 per cent for the merchant.

	Utility	*Merchant*
Operating assets	$1.00	$1.00
Rate of turnover	5	5
Sales	$ .20	$5.00
8 per cent return on investment	$ .08	$ .08
Return on sales	40%	1.6%
Operating ratio	60%	98.4%

Herein lies the key to one characteristic difference between public service corporations and industrial corporations in the financing of their expansion. The utilities require such large sums in relation to their volume of sales, which, in turn, are usually a substantial amount per unit, that a resort to the sale of both stocks and bonds in quantity is logical; earnings are inadequate to supply such sums. With bonds they are able to tap the large supply of conservative investment funds supplied by thrift institutions. Their stocks are sold to less conservative investors.

4. *Rate of return earned upon investment.* If a business earns a moderate return, it will find it difficult to finance any considerable growth out of earnings as compared with one which earns a high return. The combination of slow asset turnover and a return kept at a moderate level by regulation explains the need for the large security issues of both bonds and stocks by the electric power industry during its considerable growth in the 1920's. Industrial corporations enjoying a higher return issued fewer securities and financed more largely from earnings. A successful industrial is often able to make an above-normal rate of profit, owing to patent protection, to some new and unusual method of production or marketing, or to exceptional management. A large profit margin, when coupled with a rapid turnover of operating assets, makes for a high percentage return upon the latter. If a net profit margin of 10 per cent were left as the earnings from the sales dollar and a

turnover of 5 were obtainable, the result would be a 50 per cent return on the amount invested. Such a return, if allowed to remain in the business, would provide for very rapid expansion and make an appeal to the capital markets much less likely. Reference to compound interest tables or even a few computations will reveal the rapidity with which property increases when earning a high return. An original investment of $10,000, if it could earn 50 per cent and compound that profit at the end of each year, would reach over $5,750,000 in a decade. Needless to say, it is easier to compute than to earn these high rates of accumulation. On the other hand, a company earning a very poor return may have so little investment appeal as to have no other source of funds but its own meager earnings.

5. Distribution of voting control. The desire to retain the voting control of the corporation in the harids of a -particular group will influence the form of the financing. The use of bonds or nonvoting 46cks-avoids_ the sharing of control with others. However, after a corporation has reached a certain size, the issue of additional voting stock may actually strengthen the hold of the controlling group upon a corporation by making the purchase of control by outsiders more difficult. Small stockholders widely scattered invariably ignore their proxies or deliver them to the existing management, at least as long as the corporation is moderately successful.

6. Stability of earnings. Stability of earnings, unlike the preceding points, is not a single element but the resultant of a number of influences. Instability may be the result of either changes in the volume of the business or inability to maintain a satisfactory relation between selling price and expenses. In the matter of volume, the weakness may lie either in the industry as a whole or the shifting position of the units within the industry. Whatever the cause of unstable earnings, they make the use of bonds dangerous, and, even if their use is attempted, they will be less attractive to bond buyers. Consequently, sound principles would dictate that corporations subject to this risk should avoid bonds where possible, keep preferred stocks at a minimum, and favor common stock and retained earnings as sources of funds.

Three conditions will ordinarily make for a stable physical volume of business: (a) Industries which supply consumers' goods or services tend to enjoy more stable volume than those supplying producers' goods—that is, the equipment of industry, such as buildings, machinery, and tools. The annual volume of the food industries is much steadier than the iron and steel, railroad equipment, or construction industries. (b) Goods or services enjoying daily habitual purchase fare better than those purchased at longer or irregular intervals. The influence of habit undoubtedly determines

to a large extent what we regard as necessary. This principle may be seen in the examination of diet, where we tend to rate habitually used items as necessities, regardless of possible effective substitutes. (c) Small unit price also favors stable volume.

Sometimes luxuries and necessities are contrasted in the study of stability, but the significance of the difference is probably overrated. The larger importance of habit and small unit price is seen in the relatively stable volume of the tobacco industry, producing a luxury line, which compares favorably with the food industries. On the other hand, the sale of men's suits, which are bought at irregular or at least fairly long intervals, and at high prices, suffers a much greater loss of volume in a year of business depression.

Since competition within an industry is a constant threat to the stability of the individual unit, partial or complete monopoly is very important as a possible neutralizing influence. Sometimes regulated "natural" monopolies exist in the form of public service industries, which supply transportation, electricity, communication, gas, and water. These are classed as natural monopolies because competition in a given area would result in the duplication of expensive facilities, which would greatly increase the cost of the service to the consuming public. (The suggestion made under the heading "Operating asset turnover" as to the importance of the investment factor and the return upon that investment in the price charged to customers explains why duplication of facilities is so undesirable in the utility field.) Other monopolies exist as the result of the control of the sources of raw material, as in the case of the Aluminum Company of America, which controls all the major bauxite deposits in this country; the control of secret processes, as in certain of the chemical companies; the ownership of patents or copyrights, as in the case of Radio Corporation of America; or the ownership of special trade-marks, as in the case of General Foods Corporation, American Tobacco Company, and Coca-Cola Company. Almost all monopolies are subject to some extent to the limiting effect of substitutes. Subject to that limitation, however, earnings are possible which may considerably exceed those from ordinary competitively employed funds unless the state intervenes with regulation, as it usually does in the case of public service corporations.

In contrast to the manner in which monopoly of varying degrees removes or tempers the risk for a given business unit, thereby making financing easier, certain factors may serve to increase the unstabilizing influence of competition. Style, as found in the automobile and the women's clothing industries, may give a varying advantage to the different competing units. Where the personal factor is important, as in the newspaper and amusement fields, instability from the competitive race is especially evident.

Sometimes the competition of substitutes seriously affects a whole industry. Petroleum and natural gas displace coal on a considerable scale; aluminum takes the place of copper for certain uses; the wagon yields to the automobile; the paper carton supplants the wooden packing case; and tin cans seek to displace glass bottles. This inter-industry form of competition is sometimes the chief force disturbing certain industries or concerns. Even natural monopolies may suffer from this special kind, of competition. The steam railroad has been affected by the truck; the street railway has been affected by the bus and the private automobile; and gas for lighting purposes suffered upon the introduction of electricity until its use for heat replaced the former demand. This uncertain hazard to industry, which includes the possibility of new inventions, is virtually impossible to measure, since it respects none of the common generalizations set down here.

Most of the problems of adjusting the relation of selling price and expense arise from instability on the income side of the business, which has just been discussed, but this discussion has been in terms of physical volume and does not consider that instability which grows out of unit price changes. The tons or gallons or other units of business volume may remain unchanged, while the dollar sales volume fluctuates. The maintenance of a profitable relationship between cost and selling price is not always possible, with the result of earnings instability even in the presence of a stable physical volume of output.

Three general situations are found which may make the maintenance of a profitable relation between cost and selling price difficult: (a) regulation, (b) immobility of expenses because of large use of fixed property, and (c) losses through declines in price too rapid to permit the resale of inventory at customary mark-ups.

Regulation by public authorities of the prices charged by public service corporations is intended to maintain a fair relation between those prices and the costs of operation. However, when costs rise and increased prices are necessary, regulatory bodies are generally tardy in permitting the necessary adjustment. The result is at least a temporary depression in earnings. When the cost of coal rose during the War, gas companies in many cases suffered from the slowness with which they secured necessary rate increases, just as some profited from the rapid decrease in costs in the subsequent post-War deflation. Street railways had notorious difficulty in obtaining rate increases as their operating costs rose with the general price level after 1915.

Even when the management has free play, price changes bring problems of readjustment. Whenever large sums are sunk in a fixed form, the management incurs responsibility for this immobile

fund with no opportunity of changing its form or liquidating if the total is excessive. Relatively large fixed investment (or, in other words, low operating asset turnover) is most characteristic of public service corporations and real estate, less so of manufacturing, and least so of merchandising. If a wave of extreme enthusiasm causes excessive amounts to be tied up in a given field, depressing prices in the ensuing struggle for business, then subnormal earnings are inevitable. Rather than abandon the competition for business, any price which will make some contribution to the burden of fixed expense and investment return will be accepted as better than no business at all. The coal and real estate businesses have furnished examples of such cutthroat competition. In the latter case the constant reduction of competition through obsolescence and ordinary depreciation, destruction by fire, and, in the past, the growth of population, produce a certain, but a very slow, cure.

Difficulties of a more fleeting sort are found where the funds of business are employed in inventories of declining value. If prices decline before a resale can be effected, the holder is usually obliged to take a loss or at least a reduced profit. Sometimes an attempt is made to avoid such a loss, and the management seeks to dispose of the old stock before making a price reduction. Such a course is limited by competition and the tendency of buyers to delay purchase until cuts are made. The tendency of merchants to base their selling prices upon cost, rather than replacement price, is shown in the lagging of movements of retail prices after those of wholesale prices. The more rapid the turnover of the stock of goods, the less likely is loss from inventory fluctuation to occur; the longer the interval between purchase and resale, the greater is the hazard. Since the conversion of raw materials into finished products takes time, manufacturers as a class are more likely to suffer than merchants. If a business is required to purchase or contract for materials at a fixed price sometime in advance of use, the effect is to lengthen this period of turnover and so increase the risk. Rubber manufacturers, compelled to import their chief raw material from long distances and considerably in advance of actual use, have suffered notably in the past from the price declines of rubber.

Slow merchandise turnover is one element in producing loss from decline in inventory prices; the other is the variability in inventory prices. Prices are most variable in the basic raw materials and least so in the ultimate finished products. This volatility is sometimes the expression of wide changes in demand and sometimes the expression of large changes in supply. The list of considerations already given above as affecting the volume of business of an industry are demand influences. The supply of most of the raw materials used in the unstable construction industries are fairly con-

trollable, but the vagaries of demand make for price fluctuations, as seen in the case of such materials as copper and lumber. On the other hand, many food staples are consumed in fairly regular quantities but suffer marketwise from large changes in the supply. The best guide to the future is found in the previous experience of an industry supplemented by a study of the fundamental factors, in order to make sure that the same conditions still prevail as during the period in which the "experience" occurred.

External influences upon financing. So much for the general factors within an industry which condition the form of the financing. Outside the industry are the financial markets, which play their part.

Attitudes of the investment market. Custom and experience give rise to attitudes which act with a forceful compulsion. Certain standards come to have such general acceptance that they require observance even when circumstances would reasonably permit deviations. Again, some attitudes partake of the nature of fashions. The popularity of certain forms of securities and certain kinds of enterprise may be either very great or very slight. Real estate mortgages or public utility securities of a certain class may be so popular as to permit even relatively weak issues to be sold successfully. Coal or street railway securities may fall into such disfavor that even a well-situated company may finance only with difficulty, if at all. Stocks may at a given time be high in popular favor, so much so that conversion features may prove necessary to make bonds sell at reasonable prices. At other times bonds may be in favor, and then only those corporations with sufficient standing of the sort demanded by the investment markets can finance to the best advantage. While such attitudes may represent prejudice and the current whim, they nevertheless require consideration in the formulation of financial policies.

General level of interest rates. While large differences exist among the various classes of "money" rates, they tend to rise and fall together over the long swing. In years in which this level is high, corporations will restrict their financing to the bare necessities and arrange their contracts to make the burden of such financing as temporary as possible. When funds are obtained easily and cheaply, the management will seek to take advantage of the condition, if possible, by long-term or permanent financing.

Of the six internal factors given, operating asset turnover is especially important. This turnover figure may be thought of as a measure of "capital" need—that is, need for funds to acquire assets. To state that a business has a low turnover, or ratio of sales to investment in operating assets, is the equivalent of saying that its

capital requirements are relatively large. If the amount of assets required to do a given amount of business is relatively large, it follows that a customer of such a business is purchasing the services of "capital" with his dollar to a greater extent than when purchasing from a business in which the use of assets is less important, as evidenced by a high operating asset turnover.[2]

The various classes of business, when viewed from this angle, show great diversity, ranging from those which render very largely "capital" services, as in the case of large hydroelectric projects, to those which render personal services, which involve but little investment in capital goods. Businesses of the first type, since they involve the problem of raising considerable funds, have invariably received the most consideration in textbooks on corporation finance.

Personal Service Businesses

Because the personal service type of business offers the slightest financial problem and so will receive but little attention in these pages, it may be taken up first. Many of the enterprises in this class are not even thought of as "business," partly because of the personal service character of the venture and the absence of "trade" in the conventional sense, and partly because of the social prestige and special standards of conduct which govern certain of the professional groups that would fall in this class. In addition to the professions—such as law, medicine, and engineering, which require extended training—there would be included skilled groups—such as artists, advertising agencies, automobile repair shops, and various types of brokers—and the groups requiring less extended training or apprenticeship—such as the barber, the hairdresser, and the cleaning establishment.

Regardless of how personal the service and how slight the "capital" factor, each of these fields has to face the typical problems of the business enterprise, those, of locating the business, of creating a product or service which is satisfactory in the sense of meeting an "economic demand," of finding and holding a market against competition, and of managing the finances in such a manner as to preserve the economic life of the business unit.

Asset requirements. From the very nature of the business the initial asset requirements are not large. Those whose ambitions,

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[2] For economic analysis, it is necessary to go beyond this examination of the individual business unit and note that the goods reaching the ultimate consumer pass through a series of businesses. The extent to which a business is a. "capital" service or a labor service would be determined in such a study by a breakdown of the value added to the materials purchased through the manufacturing or merchandising of the individual concern. In other words, the character of the service is studied by relating "capital" return and labor return to the value added to materials rather than to the sales figure.

or whose parents' ambitions, are set upon a venture in this field ordinarily find the financing problem a minor obstacle. This statement becomes untrue if the amount spent for education or training plus the sacrifice of income during the period of education or apprenticeship are counted as an investment. Certainly, from the social point of view the investment is as genuine as that in any tangible property in the way of tools and equipment. An analogous situation is found in the "intangible development expenses" which are sometimes carried among the assets of a business until earnings create a surplus against which the item may be, charged off. (For the most part conservative accounting looks with disfavor upon carrying these on the books as assets, but they may be found in the balance sheets of petroleum companies.) In any case, the outcome of such expenditures by an individual or a concern are too uncertain to warrant an appeal to the public for funds for that purpose. The state may, it is true, find an expenditure in training or education profitable. It has the advantage of a group of cases, so that the outcome is not uncertain, as it is in the individual case. Consequently, endowed education and scholarship supported by the taxpayer may prove quite profitable by increasing the supply of skillful personal services. Such a social investment, however, falls outside the scope of corporation finance.[3]

Just as the problem of initial investment in the personal service business offers but little material lying within the field of business finance, so also the growth factor rarely creates a financial problem of importance. Any increase in the need for investment in equipment is likely to be of small proportions. The success indicated by a growth in the business would ordinarily mean a growth of earnings adequate to care for the additional need. Other sources of funds would be trade credit from wholesalers and supply houses, installment credit, and personal loans from relatives, acquaintances, and personal finance companies.

The problem of control is ordinarily of very little importance, since the business unit usually consists of only one or a very few persons. Because the amount of capital equipment required to do

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[3] In this manner any highly developed state of society has an "investment" not represented by stocks and bonds. The justification for calling this expenditure "investment" is that it not only produces services in the same manner as other tangible wealth but also has its origin in savings. These savings may be by parents, who may be able to produce enough to permit their prolonging the period of their children's infancy and giving them technical training and education. The benefits of the investment are ordinarily not retained by the investing parents. The investment is normally "repaid" by reinvestment in the training of the succeeding generation. The investment may be made by the state, which collects the funds by taxation and invests them in the future services of better-trained citizens rather than for current benefits.

business is very small, decisions to join with others or part company from them can be carried through whenever too vigorous disagreements as to control arise. Problems of control become more difficult as the amount of funds employed by a business grows and the number who have contributed a share increases.

Uncertainty of earnings. The matter of uncertain earnings of a personal service type of business militates against raising funds from the general public. Earning power depends too largely upon the expected length of life, the health, and the character of one or a very few individuals. All these elements are subject to change, and, in the event of failure, little survives which can be turned into cash to satisfy creditors. Rarely in this class of business is there a large impersonal organization suitable for carrying on in case of the decline or departure of a few central figures.

In conclusion, then, the small asset requirements and a high risk factor in the form of impermanence militate against public financing. Incorporations, such as in certain theatrical ventures or a business like the General Outdoor Advertising Company, mark the exception rather than the rule. Such slight funds as are needed are expected to come from the savings of those starting the business or of those intimately related .who are willing to make advances for personal reasons. This condition is generally desirable, for risk is most efficiently borne by those who are well informed and best able to keep in touch with the situation.

Merchandising Concerns

Merchandising follows the personal service business in point of high operating asset turnover. Because of the prominence of the investment in merchandise, the close economic relationship of merchandising and personal service is easily overlooked. The economic contribution of the merchant is as intangible as any personal service.[4] In paying the merchant's mark-up, the customer is paying chiefly for a service rendered by buyers and sales clerks.

Financial requirements. The primary need for funds by a merchant arises from the investment in his stock of goods. If this stock is resold quickly—that is, "turned" quickly—the "capital" service and the capital need will be relatively small. A newsstand might have a daily or nearly a daily turnover; a butcher, a baker, or

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A statement of the functions of marketing organizations may be found in F. E. Clark, *Principles. of Marketing* (New York: The Macmillan Co., rev. ed., 1932), p. 13:

A. Functions of Exchange : 1. Selling (demand creation), 2. Buying (assembly).
B. Functions of Physical Supply: 3. Transportation, 4. Storage.
C. Facilitating Functions: 5. Financing, 6. Risk taking, 7. Standardization.

a magazine stand might turn its stock weekly; a retail grocer might have a monthly turnover; and a hardware dealer or a jeweler might turn his stock only two or three times a year.

A secondary need for funds will arise if the merchant extends credit to his customers. The extension of credit requires the financing of not only the merchandise on the shelves of the store but also that which has passed into the customers' hands. A banking as well as a merchandising function is assumed. Cash sales, then, serve the useful purpose of reducing the financial requirements of the business.

Another possible need for funds is found in the real estate investment. The building which houses the merchandising activities may represent a substantial amount of funds. However, in many cases, particularly in the small and medium-sized establishments, it is possible to rent the necessary space so as to avoid the problem of a large fixed investment. Many of the great retail chain store organizations conduct their businesses wholly or in part in rented quarters, confining their fixed investment to fixtures. The problem of real estate financing is so frequently avoided by this type of business that the governing principles affecting this part of the business assets are deferred to the discussion below.

From this sketchy recital concerning the merchandising business, something of its usual financial needs may be judged. Many units are relatively small and have only a modest need for an investment in assets. Such units are likely to be managed by one person or, at most, a few persons. But before such persons initiate an enterprise, they should have had experience, and, if they possess the prudence and the economical attitude which is essential to the conduct of a successful business, they will undoubtedly have applied those qualities to their personal affairs and have accumulated a sum to apply toward the establishment of the business. In small merchandising units the owner or owners are expected to provide a substantial part of the initial capital requirement.

When the amount available to start the business is small, the business quarters will be rented rather than purchased. But what if the amount of investment in inventories and receivables requires more than the owners have accumulated? Much that has been said concerning a permanent investment by an outsider in a personal service business applies with equal force to small merchandising units. The dependence upon personal factors with an uncertain future and the instability characteristic of a highly competitive field make permanent investment by an outsider extremely hazardous. Only after the business has grown to a fair size, has demonstrated managerial ability by an earnings record, and has built up an organization which gives promise of a permanence never found in

a one-man organization can a logical appeal for funds be made to the investing public.

The small business unit,, then, unless it secures funds on a purely personal basis, is limited for the most part to the funds of the owners. Customarily, additional funds are to be had only in the form of short-term credits. The basis for such credits is found in the property values of the inventories and the receivables, which should substantially exceed these credits. The short term of such credit extensions is designed to enable collection and payment before any changes in property values can take place on a substantial enough scale to wipe out the margin of safety.'

When a business has grown to very large size in this field, it may offer its securities to the public. Great stores such as R. H. Macy & Company and Marshall Field & Company are examples of this type. The large chain store organizations and mail order houses include names that are among the best known on the major security exchanges. Such corporations do not require the frequent sale of securities to provide the funds needed for growth. Retained earnings are a major source of funds for this purpose. When some unusual expansion program is on, or some opportunity arises to purchase additional properties on a large scale, securities may be sold to raise cash.

Types of securities. As to the form of security, bonds have been unusual and stock has been the conventional form of offering. Bonds have been avoided partly because of the feeling of risk that goes with such competitive forms of enterprise and partly because the relative newness of this type of undertaking as a public investment has made logical the more speculative appeal of stock. With an excellent record of earnings during periods of depression strain, some of the older organizations in this field could undoubtedly float bonds were that a desirable or necessary course.

Since management usually occupies a secure seat in a business which has been running for some time and any new stock issues are likely to be widely distributed so as not to endanger the voting control of those already in power, common stock rather than nonvoting preferred issues has predominated in the financial structures of these large companies. Occasionally, however, particularly when the company is relatively new to the investing public and the amount of the new security issues is substantial, preferred stock of the nonvoting variety or with but a small share of the total voting power and with protective provisions drawn to make it akin to a credit instrument has been sold. This use of more than one form of se-

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The operation and standards of this type of credit are discussed in Chapters 19 and 20.

curity increases the number from whom funds may be obtained and so makes it easier to raise larger sums.

Manufacturing Concerns

A manufacturer has the financial problems of a wholesale merchant plus those incidental to the purely manufacturing activities. Operating asset turnover will therefore tend to be lower than for the two classes of business previously discussed. A large investment in plant and equipment is required. And, in addition, except in those few cases when goods are manufactured only upon order, a manufacturer has to invest not only in a supply of finished goods in order to meet incoming orders promptly, after the manner of a merchant, but also in a stock of raw materials and in goods in the process of manufacture, which include in their value outlays for material, direct labor, and overhead.

Asset requirements. The fixed investment, in addition to salesroom fixtures and a place for conducting selling activities, if any, is made up of the machinery and tools and the real estate necessary to house production operations. The factory buildings, sometimes referred to as the "plant," may or may not be rented. Small concerns, especially those located in large industrial communities, may be able to rent the necessary space to house equipment and operations. In recognition of the limited and inferior quarters sometimes available for the smaller industrial tenant, the Bush Terminal Company created a modern and efficient home for manufacturers on the Brooklyn waterfront, an unusually well-located site with respect to transportation, since it meets a prime need of the manufacturer seeking to reach the largest possible market. Where the type of structure required is of a peculiar sort, as for a motion picture producer or certain chemical manufacturers, or where the business has grown so large that it requires a plant of a size that makes it suitable only for itself, renting becomes impracticable. Landlords do not care to risk their funds on structures with so limited a renting market.

Quite clearly the different units in this field vary widely in their initial capital requirements in the matter of inventory, plant, and equipment. A more complete analysis of these factors is outlined in the discussion of promotional problems in Chapter 10. Passing mention of two major factors will serve to emphasize this matter of extreme range. The factor of unit cost will produce the difference between mousetraps and steam locomotives. Again, if large-scale production, involving the use of large and expensive machinery, is essential to efficient operation, the initial capital requirements are increased. A product in the low-price class often achieves that

position by mass-production methods and a large use of machinery. A considerable investment in machinery may be necessary in order to produce a cheap American-made carpet, while only a relatively cheap loom is employed in the production of a fine hand-woven Oriental rug.

Although the initial asset requirements of a few manufacturers may be as small as for small retail merchants, the situation is frequently otherwise, creating one of the major problems of promotion. The much greater ease with which an established business can raise funds to exploit a new product or a new technique of production gives it a most decided advantage over the new enterprise.

Form of capitalization. As regards the form of capital structure for the new industrial business, bonds are unsuitable because of an absence of demonstrated earning power and the uncertainties of competitive industry. Common, or common and preferred, stock is customarily employed. Since the whole situation is quite speculative, preferred stock is merely a device for arranging voting control and priority for the inactive interests rather than to provide securities of investment character. A preferred issue is particularly likely when some of the founding group contributes intangibles in the form of services, a special skill, or patent rights and is entitled to a large share of the control and of the profits over and above a normal return on the tangible cash investment. In such a case a preferred stock with some common rather than common alone may be allotted to those who contribute cash; those contributing intangible elements can then be given a more substantial part of the common.

After the business has been started and has demonstrated its right to further funds by success, it is likely to need but little financing. Success in manufacturing is likely to be crowned with an even higher rate of earnings than is merchandising. Often a manufacturing enterprise is more readily shielded from the fiercest winds of competition by patents, trade names, and special skills, and perhaps to some extent by the larger initial capital requirements. Expansion out of profits is probably the most common financial course.

When securities must be sold in order to obtain funds for growth, common stock is most generally offered. If for any reason such an issue appears undesirable or impracticable, bonds are about as likely to be used as preferred stock, in spite of the apparent risk in issuing an obligation with a fixed charge which must be paid in order to avoid receivership. Common stock is more likely than either preferred stock or bonds when it is already well established as an attractive security, when those in control are not concerned over the effect of a new issue upon their position of control, and when security market conditions are favorable. Whenever management finds

it necessary to give its "best security" to obtain funds at a reasonably low cost or wishes to avoid increasing the voting strength of outsiders, financing will consist of bonds and preferred stocks. Not infrequently the management looks forward to retiring these prior securities out of earnings or by the sale of common stock as soon as conditions are more favorable for the latter. The simple capital structure is looked upon as the "ideal" form for the manufacturing corporation.

Real Estate

Since the management of a piece of real estate is not ordinarily thought of as a "business," the financing of real estate is not usually discussed in works on business, or corporation, finance. Real estate is regarded either as.ALLinvestment and so outside the field of business, or as a mere part of the total financial problem of a business. As wasF011ifEd inmCTUriec fiiiriTvith mereranciising and manufacturing, a building of specialized or limited usefulness must be consid a part of the financial problem, for it cannot ordinarily be rented. When, owever, dousing of the general utility type can be rented thefinancial problem can be minimized. The securities of real estate corporations so frequently flow through the same channels as those of strictly "business" corporations that a brief comment upon this field is advantageous here. Not infrequently a corporation creates a separate company, which it owns and controls, in order to purchase, hold, and finance its real estate commitments, especially if they are of the general utility type, which would facilitate their independent financing in whole or in part.

Viewed as a distinct unit apart from the business which occupies it, a piece of real estate is an enterprise with low turnover. In the payment of rent, the tenant business is purchasing very largely the services of "capital." [6] The gross rentals paid for the use of such property, which are the "sales" of this business, are likely to range

In social economics a distinction is made between the "capital" factor, consisting of the building and any other improvements growing out of the savings, and the land factor, the value of which is the result of community growth and the character of the neighborhood and the community. Harry Gunnison Brown, *Economic Science and the Common Welfare* (Columbia, Mo.: Missouri Book Co., 1923), Part II, Chapters II, III, and VI. The importance of this distinction is that savings invested in land values do not add to production goods, as do savings put into buildings and machinery, but merely purchase the capitalized advantage offered by a community in a particular site for which the community does not collect in the way of taxes. F. M. Babcock, *The Valuation of Real Estate* (New York : McGraw-Hill Book Co., 1932), Chapters XII, XIII, and XXIII. An interesting parallel at certain points can be drawn between land-site values, exclusive of all improvements, and the value of goodwill. The value of both to an investor resides in the surplus of earning power over and above the normal return upon the tangible assets employed. Because land itself is physically tangible, the parallel is obscure to many. Goodwill is discussed in Chapters 21 and 24.

between 10 and 20 per cent of its valuation. The operating asset turnover then would be between one tenth and one fifth. If the total rents were net income to the owner, his return would amount to from 10 to 20 per cent, but a varying proportion has to be subtracted for such expenses as taxes, insurance, maintenance, and depreciation. When the tenant is supplied with special services, such as heat, light, water, telephone, elevator, and room service, the rental has to be correspondingly increased and the ratio of rentals to investment value rises, increasing the operating asset turnover ratio toward the upper limit of the range suggested above.

The initial investment required in a building used for business purposes is relatively high even for small properties when compared with the amounts required by those business occupants, such as merchants, discussed above. This relatively large requirement increases the likelihood of the owners' needing funds from an outside source to supplement their own when building new or purchasing existing facilities.

The growth, or expansion, factor is not a constant problem in real estate, as it is so often in ordinary business. Each building is regarded as an individual enterprise, and, once col ted, is re- ce 1 or slibstaniialff added to only at infrequent intervals. Financing is consequently an infrequent rather than a perennial problem.

Even limiting our attention to real estate of the business occupancy type, we find the earnings factor one concerning which generalization is difficult. In general, rental charges change less than other kinds of prices, partly because rent is the subject of long-term contracts —that is, one year or more. The actual income is likely to be affected more over the long run by the regularity of occupancy than by the scale of nominal rental rates. In this respect buildings with tenants in the small merchant class enjoy a more stable situation than those with industrial tenants, especially when the latter operate fluctuating types of business.

Risk also increases as the property becomes more unique either because of large size or because of specialized structure to meet peculiar requirements of a particular tenant. The difficulty of securing new tenants in case the old ones leave or fail is a threat to income. The effect of large size is seen in the case of the major department stores, which generally find it necessary to own their own buildings. The effect of peculiar structure is seen in banks, large motion picture houses, and more sizable factories. Normally each of these types of real estate is constructed and owned by the occupant. In the event of business failure, the problem of finding a

new tenant would generally be too difficult to suit the landlord who invests in real estate for the use of others.

in this field 1· is associated with two factors: first, the clegree_to-w is a structure is TiEely to be abre to secure alternative users' and, second, if it is of a type which may Thiratterilativeusers, the degree to which the demand is vatiffbfe. When the ability to obtain alternative users in casthe tenant fails or wishes to move is small, the business will normally have to finance the real estate as a part of its own general requirements. Whenever the property is of the "alternative user" or "general utility" type, the real estate is likely to be financed as a separate business unit, for the reason already mentioned—namely, the substantial initial asset requirements. The general method for financing such a unit is to issue a single first mortgage, or a block of first mortgage bonds up to the limit permitted by the investmetit niarEet, the baTaiio61615e financed by the owner, or, in the case of a corporate form, by the common Wt6ckholders. Resort to a second mortgage or to the approximate equivalent in the form of preferred stock is usually the result of limited means of the owners and is not an ordinary device. Conservatism in incurring debt should be proportionate to the probable variability of demand over a period of years. Demand for space is ordinarily more variable in a commercial hotel than in a residential type of building and more variable for expensive apartments than for moderate-priced apartments.

Extractive Industries

At first glance the extractive industries appear to have much in common with real estate. In this country mineral deposits are ordinarily the property of the owner of the land surface directly above. Furthermore, the economic principle of marginal productivity is applicable in determining the value set upon the deposit just as it is for any piece of land. However, the exhaustible nature of the resource sets it in a class apart.

The valuation is the discounted, or present, value of the future stream of estimated net income after all expenses, including a return upon the investment in equipment needed for extraction, are met. If these costs, present and prospective, were two dollars per ton for a given bituminous coal mine, and the selling price were the same figure, the mine would have no commercial value, although exploitation would be warranted. Even though a mine does have value before development, it need not constitute a financial problem in the sense of requiring that cash be raised for its acquisition. The discovery of mineralization may have been made on unowned and otherwise worthless lands, and title may have been acquired at little

or no cost. If the land does have value for other purposes, the owner may be induced to allow exploitation for a share of the business, some of the common stock. In the oil business this sharing often takes the form. The common practice is to provide a lease arrangement whereby the owner of the land is entitled to a contingent rent for the right to exploit the mineral resources under his land. This special kind of rent is called a royalty and is likely to be about one eighth of any crude oil brought to the surface.

The customary financial problem arises in the attempt to raise the funds needed to develop the property to the production point. Development will include the cost of opening the mine or drilling the well and securing the necessary equipment for extraction and for such treatment as is needed to reduce the output to marketable form. In contrast to the legal and economic similarities of the mine to real estate, in financing the mine more closely resembles a manufacturing situation.

What has been said concerning the risks of manufacturing applies with even greater force to the extractive industries. Aside from any moral risks, created by the unscrupulous and fraudulent promoters who have all too frequently infested this field; the business risks are high. Most obvious are the geological uncertainties associated with the exploitation of nature's unseen treasures, which are hidden underground. This hazard has been somewhat reduced for deposits of the cheaper sort, which have to occur in large masses to justify extraction. The size of deposits of coal, iron ore, and copper ore, for example, may be roughly outlined and the chemical nature of the mineral bed may be checked by drilling operations.

A major economic hazard lies in the fluctuating price of products in this field—with sometimes the exception of gold—for they are the raw materials of industry. Even when partial monopoly is present, as for aluminum and sulphur, the business cycle produces major price variations. Over the long run, major upsets arise from the discovery of new sources of supply, as in the case of South African discoveries of copper, and in the growth of substitutes, as in the case of fuel oil for coal and aluminum for copper.

Prior to proved discovery, no adequate basis appears for making an appeal for funds from the general investing public. The ordinary basis for legitimate work in exploration is provided by individual prospectors or established companies. Subsequent to discovery, principles governing financing follow along the lines suggested in the discussion of manufacturing business. Because of the risks involved, common stock would appear to be the logical instrument for financing. In the initial stages of development it is almost invariably employed, but the larger, well-established companies,

notably in the field of petroleum, have quite often used prior securities, mostly bonds, to raise funds.

Agriculture

Agriculture is not ordinarily mentioned in works on business finance but is regarded as a distinct and specialized field. As a business, it is predominantly conducted as a sole proprietorship with its own special forms of finance.? The large-scale farm employing the corporate form of organization is exceptional. Farming quite often seems to be a "way of life" marked by deepseated leanings toward the land rather than a "business" chosen solely because of its economic attractions. So, while an extended treatment in these pages would be inappropriate, it is of interest to see how the financing of agriculture falls in with the general analysis for other types of business activity.

The greater part of the property values of the usual farm is in the land values rather than in the buildings and other improvements. UsuallyTIierinal sum required, for going into the business of farming is relatively large', so that it would be difficult to start without any financial aid: Mortgage financing provides a partial answer. In the years prior to the first World War, the rising level of commodity prices—and farm products rose more rapidly than the average—coupled with the rapid growth of population, made for a rising trend in farm land values in this country. Iarian ages were consequently regarded as choice investments. The decline in farm values which followed shortly after the close of the War grew out of the spectacular decline in the price of farm products. This decline was a part of the general decline in wholesale commodity prices, particularly accentuated in the case of farm products as the result of the abnormal overexpansion created by war detnands.[8] The declining land values of the 1920's have weakened farm mortgage security but have not altered the general principles applicable to this field of financing.

The growth factor does not usually create major problems. In this respect agricultural and real estate finance resemble each other. The reason lies in the one-man character of the typical farm, which prevents its expansion on a scale comparable to the corporate organization. When and if expansion does take place in the size of the farm at irregular intervals, financing is likely to be effected

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See Ivan Wright, *Farm Mortgage Financing* (New York: McGraw-Hill Book Co., 1923). See also the *Annual Reports of the Farm Credit Administration.*

If population becomes stable, and increased mechanization of the farm and the use of improved methods of operation reduce the amount of land required to produce our needed food supplies, then the declining trend of land values initiated during the 1920's may continue.

through a mortgage or the savings of the owner or a combination of the two.

The importance of the "capital" factor, as reflected in the operating asset turnover ratio, is probably variable, although adequate data to judge the matter are lacking. On this point, farming would appear to resemble manufacturing. Just as in some manufacturing the fixed investment in equipment is relatively small and the bulk of the selling price represents payment for labor and material rather than for "capital" service, so in some farming the labor costs constitute a relatively high proportion of the product value as compared with the part attributable to "capital" or to "capital" and land.[9]

The short-term financing problems connected with loans during the growing and marketing period are akin to the similar problems faced by the small manufacturer. Whether the farmer is engaged in raising crops or in animal husbandry, the short-term investment in the farm "inventory" is tied up for a relatively longer period than in most manufacturing and so constitutes an additional influence to make operating asset turnover low. It is small wonder that a business so burdened with financing problems and conducted by numerous small proprietors, each with a vote, should turn in desperation to the Federal Government for relief during a period of distress, such as that which began in the 1920'8.[10]

Public Service Corporations

Financial characteristics. That group of businesses commonly called *public service corporations* includes the .steam railroads, the tractions both urban and interurban, electric light and (23,. vr, gas, telephone, water, ---All ottlresc----are chaTacterized by very low operating asset turnover. The customer of this group of industries is buying to a very large extent the services of economic capital. As a result, in the normal company in ordinary times approximately 30 to 40 per cent of the consumers' dollar goes to pay for the use of such capital ; the percentage is somewhat less in the case of the steam railroads, and often considerably more in the case of hydroelectric power and water companies. The public service corporations resemble real estate ventures in this respect but differ from them in that the land factor is ordinarily a minor element in the total property valuation, save possibly in the case

Since the net return of the ordinary farmer includes an undivided mixture of return upon his investment and for his labor, "costs" cannot be discussed with the same precision as in other lines of business. The Department of Agriculture has, however, made studies in this direction, such as its Bulletin No. 1446, *Cost of Producing Winter Wheat and Incomes* from *Wheat Farming in Sherman County, Oregon* (1927).

" For further description of farm credit methods, see the references cited in footnote 7.

of railroads and electric interurbans, which own their rights-of-way. This peculiarity is due to the use of the community's streets and highways for transmission lines, gas or water mains, or tracks, as the case may be.

Not only are the initial asset requirements substantial in this field, but growth to meet the expanding requirements of growing communities, as well as increasing per capita demand, has created a constantly recurring financial problem. Fortunately for these industries, which have such large and continuous needs for funds, the conditions favor public financing. The several types of public service business have a relatively permanent place in the needs of the public. Water, gas, electricity, and the, telephone all enjoy a rel'vely_stable demand as necessary consumers' goods. The raction lines have Suffered severely since 1920 as a result of the development of the bus and the private automobile, except in a few major metropolitan centers. Similar, though smaller, traffic losses have affected the steam railroads, so that they have made a less satisfactory record of stability in the depression of the 1930's than in previous periods of business distress.

Relative stability of earnings for the individual corporation also has been attributable to the monopoly, or near monopoly, character of the public service business. The railroads, whose growth came more largely in an earlier period, when competition was still regarded as the suitable and only necessary regulator of rates and service, compete with one another more than the other types of public service. This competitive tradition was perpetuated in the Transportation Act of 1920, which, although specifically encouraging consolidation by directing the Interstate Commerce Commission to draw up a plan for consolidating all railroads into a limited number of systems, laid down the restraining principle that competition should be preserved as fully as' possible and that, wherever practicable, the existing routes and channels of trade and commerce should be maintained (Sec. 168).

The term *natural monopoly'has* been applied to the public service bUsiness by the econblialSt Monopoly is natural in the sense that markedly higher costS aTe created by competition_ as_ the result–of -theunnecessary duplication of a considerable part of the investment serving the consumers. Thus, with two telephone companies 1171WGity, both Would be obliged to extend their lines down each street in order to obtain but a part of the customers. Some persons would feel it necessary to install the service of both companies so as to be able to communicate with the subscribers of both systems. Similar duplication of investment can be traced in the other types of public service. Were the return upon this investment and its maintenance an insignificant part

of the cost to the consumer, the extra costs due to duplication might be more than offset in other directions as a result of the spur of competition to economy. But the large significance of the return upon investment has already been noted for this type of business. When the maintenance of the property is added, more than half of the cost of the service has been accounted for. As a result monopoly is said to be "natural." Excessive charges, which are the normal fruit of monopoly, are checked by public regulation.

Importance and forms of public financing. The integrated public service enterprises, as would be expected from this description, both need to and are able to command funds for their operation on a large scale. "Rails" and "utilities" were the first classes of business to win a broad distribution for their securities in this country. "Industrials," the financial classification used to include manufacturing, merchandising, and mining, have won favor more recently, but until after 1920 they were felt by most persons to be in so speculative a class of securities as to be most unsuitable for broad distribution. "Financial" and "real estate" stocks and bonds ordinarily have been of interest only in the local markets and did not achieve large distribution even there until very recent years.

The considerable use of bonds by public service corporations follows, then, from the need for utilizing all the convenient sources of funds, plus the ability to assume fixed charges because of the assurance of earning power upon a relatively stable level. During the period of early growth, bonds are likely to be issued up to the limits which the standards of the investment market will permit.

As growth slows down and investment standing is more firmly established, the corporation is likely to issue a larger proportion of common stock as a measure of conservatism.

In recent years the desire to tap all possible sources of capital funds has led to the popularization of preferred stock among the electric light and power companies. This instrument, with its higher yield, has appealed to the individual investor, while the lower-yielding conservative bond has been more readily and cheaply marketed among institutional and fiduciary buyers. The use of nonvoting preferred stock has also permitted the management of promotional groups to maintain voting control through its common stock with a smaller investment than would have otherwise been possible.

Financial Companies

Characteristics. Among the broad class of business organizations included under the term *financial* chief of which are

banks and insurance companies, the differences are so considerable that they prevent any ready generalizations concerning the initial capital required, growth probabilities, earnings stability, or even operating asset turnover. With respect to the factor of initial asset requirements, there is the need to achieve a large enough size to provide a volume of business that will cover the costs of operation with a minimum staff of reasonable competence. This consideration, plus that of insuring financial responsibility, explains the laws which require a minimum paid-in capital stock for banks and insurance. The national banking law (Sec. 17a, as amended in 1933) now requires a minimum capital of $50,000 in cities not over 6,000 population, $100,000 in cities over 6,000 but not over 50,000 population, and $200,000 in cities over 50,000. In the State of New York, an important center for the insurance business, stock life insurance companies are required to have a minimum capital stock of $100,000 and a surplus of $50,000 paid in before commencing business.

If the financial corporation is a pure middleman collecting funds from the public by the sale of its own securities, on the one hand, and merely reinvesting in other loans and securities, on the other, the gross revenues would consist of interest and dividends, which, when compared to operating asset investment, would give a very low operating asset turnover figure, even lower than for public service and real estate corporations. The figure would depend upon the rate of interest or dividends collected. Such a situation does substantially exist for some purely financial intermediaries, or middlemen, such as the investment trust, the building and loan association, and the mutual savings bank."

Some lending institutions, notably the personal finance companies and the automobile finance companies, charge higher average rates to their customers than the institutions just mentioned. This practice would raise the "turnover" figure. An examination of their earnings statements shows that considerable amounts are spent for making and collecting their loans, so that the charge has to be large enough to cover the cost of these services, as well as to pay a return for the use of the borrowed funds.

Where the institution does not make loans for its own account but buys and sells financial instruments, the sales are the gross amount of instruments sold in a year, and the turnover should be high in a successful situation. The investment banker and the commercial paper house are engaged in special types of merchan-

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"Both the building and loan association and the mutual savings bank are mutual organizations formed under special laws and do not properly arise for our consideration in this discussion of private profit-seeking business corporations.

dising. Commercial paper houses, which merchandise the short-term promissory notes of large concerns to commercial banks, have reported "capital turnovers" of from fifty to a hundred times. Since their volume of business varies considerably from month to month and much of the funds employed to carry their stock of "paper" is borrowed from commercial banks and not included in this "capital" figure (net worth), it is easy to understand why the turnover figure appears both high and variable. [12]

The insurance companies, which fall in the financial classification, show gross revenues, or "sales," that include the charge for the insurance service rendered, the cost of which consists of overhead expenses and the losses from the hazard insured against. For this reason and because of large differences even among companies carrying on the same class of business, turnover figures have little significance.

Form of capital structure. Outside of the holding company and the investment trust, capital structures are uniformly of one class of security—namely, common stock. The general reason for this is that a major liability to customers exists—to the policyholders of fire insurance companies and depositors of banks—which requires a single fund to provide a margin of protecting assets with no shadow of a competing claim. To create bonds would be to set up a competing creditor claim, and to introduce more than one class of stock would be to suggest a financial weakness on the part of the controlling group, an impression that must be studiously avoided by a type of business which lives on its credit with the general public. [13] Minor exceptions to this rule are found in the case of certain specialized credit institutions, mostly quite young and of rapid growth, which purchase installment paper of various sorts and second mortgages. These organizations do not ordinarily obtain credit from the general public. Any borrowing is ordinarily from commercial banks. [14]

The holding company is so purely a device for combination that it can hardly be said to operate a "business." Therefore its nature and capital structure are more appropriately considered at a later point (Chapter 25).. The investment trust, because it is formed to collect funds and then ifiFest tffefifirTithersecTiritieS, can have a capital structure of any form it chooses. The extent

" "The Commercial Paper Business," *Federal Reserve. Bulletin,* September, 1921, p. 1056.

"Exceptions to the rule were the emergency advances to commercial banks by the Reconstruction Finance Corporation after the banking moratorium of 1933 in the form of preferred stock or income debentures to offset impairments of the banks' capital stock.

"An innovation was made when two finance companies, the Commercial Investment Trust Corporation and the Commercial Credit Company, issued debenture bonds in 1929 and 1936, respectively.

to which it does assume fixed and contingent charges through issues of bonds and preferred stocks would be expected to determine the degree of conservatism for the investment of its portfolio. In the short history of the American investment trust movement, this simple principle has not been properly observed.Th

Summary

This chapter has surveyed the several financial characteristics which primarily influence the manner of raising funds and the form of capital structure of the several classes of business. The amount of assets needed initially determines whether or not an appeal for funds to outside savers and capitalists, for which the corporate form is so useful, will be at all likely. For almost all personal service, many merchandising, particularly of the retail variety, and some manufacturing concerns the need is so slight that thrift, a fortunate legacy, or a few obliging friends is sufficient to make the beginning. When any of these classes of business require corporate organization and a sale of securities, common stock is the ordinary rule, a rule dictated by the competitive risks and uncertainty involved. When priorities to income or control by a particular group is desirable, preferred stock, or classified common stock, which is the equivalent, will be employed in the capital structure The financing for a new mining enterprise will usually conform to the rules laid down for manufacturing.

Real estate and public service corporations, with their larger need for funds at the outset, are fortunate in having greater stability of revenues and a more predictable future. The combination of financial need and attractive appeal makes debt in the form of mortgages or bonds probable as a part of even their initial financing. In financing established electric light and power utilities in recent years, preferred stock has also been a commonly used instrument.

After any of these types of business have been set in motion, sufficient earning power should be generated to aid materially in the later financing. In the case of the personal services, merchants, and manufacturers, the earnings very often supply sufficient means for all financial growth. If they do not, stock—usually common, but sometimes preferred-is ordinarily employed. Occasionally, if the character of the property and earnings warrant, even bonds are used. The use of bonds in this "industrial" group is generally confined to the manufacturing and mining corporations.

"For one of the early attacks upon the abuses of investment trust practice, see John T. Flynn, *Investment Trusts Gone Wrong!* (New York: New Republic, Inc., 1930) ; see also L. Chamberlain and W. H. Hay, *Investment and Speculation* (New York: Henry Holt & Co., 1931).

Real estate is not ordinarily thought of as having a growth problem requiring financing. The public service corporations, with their usually moderate rate of earnings and need for payment of a considerable share of such earnings for interest, are virtually obliged to continue selling securities, unless growth dwindles to insignificant proportions. Hence the same type of security emissions continue to mark their financial history, although a somewhat larger proportion of common stock is usually employed after the company's place in the community has been established by a dividend record.

Financial corporations of the merchandising type, such as the vendors of securities, have usually followed the practice of using common stock only, like their humbler mercantile relatives. Frequently the partnership form of organization and used bank borrowing to supplement their funds. Even today, only the exceptional investment banking house has stock in the hands of the general public. The other and major nonmutual financial corporations, the commercial banks and insurance companies, have used common stock alone as a conservative counterbalance to their heavy liabilities to customers, except in those cases where preferred stock or income debentures have been issued to the Reconstruction Finance. Corporation as a matter of emergency aid.

A closer analysis of basic differences among the various important classes of business will be taken up later (Chapters 11 to 13). The factors which condition financing will also be valuable as background for the study of finance in the various stages of the life of the business, the treatment of which begins in the next chapter with the study of promotion.

CHAPTER 10

PROMOTION

OF THE several phases of the corporate life around which it is convenient to group and discuss financial problems, the first is promotion. Promotion is the first step in the corporate history and the one which gives it existence. This step starts with the conception of the idea from which the business is to evolve and continues down to the point at which the business is fully ready to begin operations as a going concern.

The Promoter

Types of promoters. The pr.omoter is the person who assembles the men, the money, and the materials into a going concern. He may be the individual who is creating a small one-man business for himself. He may be an engineer who creates companies which will award him construction contracts. He may be a capitalist who is seeking to employ his funds to advantage. Occasionally there is found a man who acts solely as a promoter and is compensated for his efforts in cash or securities. Such a person may be anyone from the conventional figure of fiction—a charlatan largely concerned with the sale of stock, the proceeds of which are very largely to line his own pockets rather than to found an enterprise—to the other extreme of the powerful and opulent promoter of consolidations of the Charles R. Flint type.[1]

Promotion includes two types of organizing work, the founding of a new business and the creation of a new organization by the combination of two or more existing concerns. Since the latter is more appropriately a consolidation problem, it is treated at a later point as one of the possible problems in the life of an already-going business (Chapter 24). In either case, however, it is de-

1 Charles R. Flint was the promoter of many consolidations. Among the well-known companies which have sprung from his activities are the American Chicle Company, the National Starch Company, the Sloss-Sheffield Company, and the United States Rubber Company. His story is told in autobiographical form in *Memories of an Active Life* (New York and London: G. P. Putnam's Sons, 1923). Popular in style, this work omits much of the concrete financial data which would make it valuable to the student of finance and business. Another work in this field, of no less interest and in more scholarly form, is A. S. Dewing's *Corporate Promotions and Reorganizations* (Cambridge: Harvard University Press, 1914).

sirable to point out that this work, when properly conducted, demands skill and judgment and merits compensation. Intangible though the results appear, the services of the midwife of business have genuine social value. Heilman has expressed the idea as follows: "No enterprise of any importance can be inaugurated without the services of a capable promoter and organizer. He is the man who sees the opportunity, who can make others see it and believe in it, who organizes the plans and pushes them to completion?

Stages in Promotion

Discovery: the first step in promotion. The work of promotion may be divided into three steps: discovery, investigation, and assembly. Discovery consists of finding the business opportunity to be developed. The discovery may be the conception of a new device, the invention of a physical instrument, or the formulation of a new method of achieving a business end, such as the initial application of a mail order method to the merchandising of retail dry goods. There need be no touch of inventive imagination, however, for discovery may mean merely the idea that initiates a new unit to compete in an existing line of business.

This step may represent little or much effort. An invention, for example, may represent a single happy inspiration—the idea of placing a rubber tip on a pencil for erasing—or a slow outgrowth of laborious and expensive experiment by an Edison. A mine may be found as the result of a lucky accident or of considerable exploration by a highly paid staff. A new merchandising establishment, factory, or utility may start from a chance impulse or from a careful, systematic, and perhaps costly market survey paid for by the promoter group.

From this description of the work of discovery, it is apparent that, when it is of the exploring type, it may result merely in the founding of new branches or the improving of the wares or services of existing business, rather than in the creation of new business units. Progress within an old business rather than promotion of a new one is apt to be economical for three reasons: (1) the work of exploration can be conducted by those already skillful in the field and therefore at a relatively low cost; (2) the results of discovery can be more readily put into operation, since money, personnel, and equipment are already available; and (3) the losses which an old business suffers from discarding obsolete equipment and disintegration of organization can be offset by the profits from the adoption of the new ideas and transfer of personnel to new activities. Prog-

Ralph E. Heilman, "The Development by Commissions of the Principles of Public Utility Capitalization," *Journal of Political Economy,* November, 1915, pp. 895-896.

ress may mean very painful losses to capital and labor, but these may be reduced if the change can take place within the compass of the organization affected. However, discovery of this kind does not lead to promotion in the sense employed here—namely, the founding of new business units—except in those few cases where the new endeavor is so distinctly different that a new corporation seems logical for its development.

Investigation: the second step in promotion. The foregoing description of the work of discovery, showing how it may be the result of systematic exploring study, indicates that it sometimes overlaps the second promotional step, investigation. This second step is an analysis of the proposed business to determine whether it is economically practical or not. In the language of finance, investigation is the work of estimating probable earnings and probable capital outlay in order to determine by comparison of the two whether or not the outlay is justified by the estimated earnings. The estimated earnings must provide not only a return but also a return that will be high enough to compensate for the risks involved, which means an amount sufficient to make the securities of the new corporation worth at least the amount contributed by those who supply the funds and services. Where risk is high, as in a mining enterprise, the expected return may be in the form of appreciation, which is required to offset the probable losses of principal. In such a case the projected earnings would have to be high enough to give hope of a market value in excess of original investment by the necessary "premium for risk."

The first forecast involves an estimate of earnings, or the expected profit and loss statement for a business not yet established. At first glance such a problem seems insoluble, in view of the difficulties of making a forecast even for a going business with a record of past activities upon which to build estimates of a future. However, if a business is about to be started upon something more than pious hopes, some estimate of profits must exist in the mind of the founder. The object of a forecast is to reduce to black and white the details and basis of this conjectural situation. In place of a nebulous dream, financial outlines are drawn. The projected income and expenses are laid down out of the experience of those shaping the enterprise and form a basis to be tested by those interested in the promotion. Vagueness at this essential point is a characteristic of the fraudulent and the unskilled promotion.

The problem of estimating probable earnings is twofold: (1) estimating the gross revenues or sales; and (2) estimating the expected costs of doing business.

Estimating gross revenues. Three possible methods for determining the probable gross revenues or sales are (1) actual

sampling, (2) statistical analogy, and (3) securing initial contracts sufficient to assure the minimum volume of business necessary to justify starting the enterprise.

1. Sampling the market. Actual sampling may be employed if the product or service can be marketed on a limited scale in a manner that will duplicate the conditions that are planned for large-scale operations. The idea is most logically applied to promotions in which the merchandising problem is the central one. Thus, a new food product to be merchandised under a particular plan could be tried out in one or more communities of the desired type. Or in a mail order business a test may be made with a given piece of sales literature upon a sample mailing list.[3] In mining, the presence of a market for standard mineral products is assumed at going prices. Fair samples of the ore deposit may be assayed, and, if the size of the deposit can be blocked out, a measure of potential revenues may be made.[4] In this regard the student of statistics, marketing, and business practice is in a position to profit from the lessons of the going business which employs methods illustrative of this type of attack upon the problem.

Such a sampling process permits a more intelligent estimate of the extent of the market. Light is thrown upon the expenses of developing new business, although clearly the conditions under which the sampling is conducted may make the cost unrepresentative of what might be experienced were the same program to be repeated on a larger scale.

2. Statistical analogy. For many kinds of enterprise the sampling method is impractical. A bank, a utility, or a small merchandising enterprise is not in a position to experiment on a part of its market before starting in earnest. Many of such businesses can employ a parallel method, called *statistical analogy,* which, in effect, regards the experience of other concerns operating under similar conditions as a "sample" that pictures its own probable future.

Thus in the electric light and power and gas industries data are available showing per capita consumption.' The problem for a

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Statistical material on markets for various products and series of data which are indicative of the size and extent of consumer markets may be found in the *Market 'Research Series* and *The Market Data Handbook* and its *Supplements,* published by the U. S. Department of Commerce, Bureau of Foreign and Domestic Commerce. Discussion of the technique of market sampling in test communities is given in Lyndon 0. Brown, *Market Research and Analysis* (New York: Ronald Press Co., 1937), Chapter X.

The estimated net income which can be derived from a given mineral deposit depends on four things: (1) the probable size of the ore reserves, determined by sampling; (2) the estimated average sales price; (3) the costs of extraction and treatment; and (4) the length of time during which the product will be sold. Harry G. Guthmann, *Analysis of Financial Statements* (New York: Prentice-Hall, Inc., rev. ed., 1935), pp. 416-420.

Data on per capita consumption in these fields is available in American

concern entering either of these fields would be to find communities of similar size and economic character as a basis for securing estimates of a potential market. Figures for postal receipts, automobile registrations, telephone subscribers, bank deposits, and life insurance sales are typical of the kind of material studied in order to assure the selection of economically comparable situations. An allowance would need to be made for the passage of a period of time sufficient to permit the newly organized business to develop the market to a potential limit.

The potential market for a public service corporation is especially susceptible to this type of study because of its monopoly position. Competition, save in the case of the steam railroads, is only of the indirect type—the competition of substitutes. But even in the field of competitive business, potential market possibilities can be estimated, particularly for the retail merchandising unit, where location is an important factor. A bank or a retail store should be able to make a good working guess of its future possibilities by studying the effect of location.[6]

The chief need in most cases of this competitive type is the assurance of the minimum volume of business that is sufficient to make a unit of the smallest probable size economically practical. In each situation, whether the proposed business is a bank, a quality grocery store, a drug store, a factory, or a mine, there is a minimum volume of business required to make the project practical. If this minimum cannot be attained, losses are unavoidable and the capital invested will be eventually dissipated no matter how the expense budget is trimmed Many too small business units of the lone-shopkeeper type are initiated by unskilled persons who regard such an enterprise as requiring no particular ability and as providing a desirable "investment" for their small funds. Although, by its very effectiveness, chain store competition may arouse hearty opposition of small independent retailers, it may, by teaching the lesson that "storekeeping" is no safe "investment" for the savings of those without mercantile experience or training, discourage this

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Gas Association, *Consumer Survey of the American Gas Industry* (New York, 1932); Department of Commerce, *Census of Electric Light and Power: 1937* (Washington, 1939) • annual statistical and review numbers of the *Electrical World;* Moody's *Manual of Investments, Public Utilities* (annual, blue *section).*

For even so difficult a problem as that of an interurban line, in which each situation might be regarded as being unique, data have been collected. See F. W. Doolittle, *Cost* of *Urban Transportation* (New York: American Electric Railway Association, 1916).

, 'For the sort of information used in analyzing the need for a new bank, see J. F. Ebersole, *Bank Management* (New York: McGraw-Hill Book Co., 2nd ed., 1935), pp. 317-329. Books on retailing discuss the factors of importance in selecting the location of stores. See Paul H. Nystrom, *Retail Store Operation* (New York: Ronald Press Co., 4th ed., 1937), Chapter XVII.

type of enterprise and result in the prevention of much waste of savings.

3. *Insuring volume by contracts.* Occasionally a business is found for which a limited number of customers is sufficient to assure the minimum volume of business required to care for a minimum expense budget. By securing definite contracts for this minimum volume, the reasonable success of the promotion is assured. The producer intending to supply manufacturers with raw material, parts, or equipment might find this course possible. A substitute course, which lacks the same certainty, is to obtain assurances of business from potential customers who are friendly to the management of the proposed enterprise. A bank, for example, might bind these assurances by selling its stock to businessmen who are sympathetic to its founding.

If the estimated volume of business is in physical terms rather than in terms of dollars, the problem of prices must be analyzed to determine the expected gross revenues. Where prices are not already set by the competition of the market at a very definite figure, they should be set with an eye to securing maximum profits rather than maximum volume or maximum unit profit.[7] Although the policy is one to be stated in financial terms, it involves economic questions, such as the elasticity of demand and problems of marketing policy, and so goes beyond the limits of a discussion confined to the field of financing.

Estimating the cost of doing business. Against the estimated sales or revenues must be set up the probable expenses which will be incurred to carry on this business. The costs and expenses are subject to even greater precision in estimate than the volume figures. (The accountant usually applies the term *costs* to those outlays going toward the production of the goods or services sold and the term *expenses* to the outlays for selling and general administration.) Wage rates, rentals, material prices, tax rates, and insurance rates, even though subject to variation, are all definitely measurable. With a given volume of business in a given location, the amounts which will have to be spent on these several items should be estimated accurately by experienced persons unless the venture is of a novel sort. The greatest uncertainty on the cost side of the forecast is probably to be found in the estimate of marketing expenses for novel products and services, and even this problem is very closely related to the major forecasting difficulty—namely, estimating probable volume.

[7] For discussions of pricing policy see P. D. Converse and H. W. Huegy, *Elements of Marketing* (New York: Prentice-Hall, Inc., 2nd rev. ed., 1940), Chapters 33 and 34, and *Selling Policies* (New York: Prentice-Hall, Inc., 1927), Chapter XII; and F. E. Clark, *Principles of Marketing* (New York: The Macmillan Co., rev. ed., 1932), Chapter XXI.

Estimating financial requirements. After the promotional earnings estimate has been made and the factors of volume, selling price, costs and expenses have been set down, the financial requirements of the business may be estimated. An outline of the items which go to make the total figure is as follows:

I. Tangible property required.
- **A.** Current assets.
  1. Normal cash balance.
  2. Inventory of merchandise and supplies.
  3. Funds tied up in balances owed by customers.
  4. Miscellaneous current assets.
- **B.** Fixed assets.
  1. Tools, machinery, equipment, furniture, and fixtures.
  2. Land and buildings.
  3. Miscellaneous fixed assets.

II. Intangible investment.
- A. Promotion expenses requiring cash.
- B. Organization expenses.
- C. Operating losses, other than depreciation, up to the time when the business will be financially self-sustaining.

The estimates for each of these figures should be supported by schedules in detail that will evidence the skill and care employed in their compilation. Rough guesses are unsuitable. The importance of the various items in this list will vary greatly among the several types of business discussed in the preceding chapter. A personal service business will have little or no fixed property or inventory. Merchandising concerns may need very little fixed investment, possibly only minor amounts of furniture and fixtures. For the manufacturer, fixed investment is likely to be more important, partly because of the greater investment in equipment and partly because of the greater difficulty in securing efficient housing save by constructing a building adapted to the particular needs of the enterprise. For public service and real estate corporations, fixed assets are all-important, often representing **90** per cent of the total tangible property. The financial corporations cannot really be said to have financial requirements in the same sense as the other business types. A small amount of funds will be needed to care for furniture and usually a building if a commercial bank is involved. Funds for the intangible item of initial operating losses may also be needed. The bulk of the assets of such a concern, however, are its investments, which are in proportion to the size of the business that results from relations with customers—the deposits of the commercial bank and

the prepaid premiums of the insurance company—rather than the result of funds received from the sale of securities. The amounts which must be raised by financing are set, then, by the minimum standards of the state, which may require certain sums to be paid in by stockholders before business can be started, and by business standards, which require a certain net worth to insure adequate protection for the amount of business contemplated by the organizers.

I. A. *Current asset requirements.* Some comment oh the individual items in the foregoing list may be useful. The amount of cash to be shown in the first place on the list is the normal or ordinary balance which will be needed by the business after all the other assets have been purchased and the business has settled down to the point where the disbursements are balanced by receipts. A minimum is usually set at one or two months' expenses, save in those cases where cash performs some special functions. In banking, it is the reserve against withdrawals by depositors, and a certain minimum percentage will be held against deposits according to the likelihood of withdrawal and the requirements of banking laws. Some businesses also find it desirable to keep balances in order to establish lines of credit with their banks [8]

The asset represented by merchandise should bear a fair relation to the contemplated volume of business and should be adequate to provide a suitable variety of types, qualities, and sizes for the needs of the business. If the estimate made up on the latter basis seems too high by the first test, it suggests either an overstock or a business volume too small to justify a stock of goods large enough to give customers suitable service. In the case of manufacturers' inventories the partly finished and finished goods will include not only the sums for materials but also for labor and overhead, the accurate estimate of which will depend upon the skill with which the previously mentioned earnings forecast figures have been compiled.

A partial reduction can sometimes be made in inventory requirements (raw materials and partly finished goods) if outside manufacturers will make up goods on order and require payments only upon delivery of the finished articles. Such an arrangement would eliminate the investment in raw materials and partly finished goods and leave only the investment in finished merchandise. In the textile trade, the extreme situation is sometimes found where manufacturing contractors may not own the merchandise in either its raw state, in process, or in finished form, Even payroll requirements may be advanced. In this case, outside selling organizations engaged in factoring sometimes assume the whole burden of financing the inventory through advances to the manufacturer. Manufacturers in other fields, particularly where goods are expensive and made to

[8] See Chapter 19.

order, sometimes obtain advances on their contracts. In the field of magazine publication, prepaid subscriptions constitute a similar source of current funds.

The amount of the asset represented by accounts and notes receivable is not, strictly speaking, a definite sum which the business has to pay out, although the investment is there. The account receivable is a claim created against a customer by a sale and represents an investment of the business because of the amount spent for the goods or services delivered to the customer plus the selling and administrative expenses required to conduct the business in a way which makes sales and the consequent receivables possible. Indirectly, then, the receivable does represent an actual outlay, save for the net profit element. The latter is "invested capital" in the sense that it is income which the stockholders will need to leave in the business until cash has been realized or else raise additional cash as a part of their initial financing program in order to release this sum for dividend distribution. Since the net profit is usually a relatively modest percentage of the receivable, particularly in a business just starting, the amount of the receivables should usually be figured as constituting so much of the initial financial requirements, without any adjustment for net profit.

Miscellaneous current assets or prepaid expenses consist of certain items that have to be paid in advance by the business, such as in surance premiums, rent, and sometimes deposits for utility services.

I. **B.** *Fixed asset requirements.* In estimating the fixed asset requirements the extremes of inadequacy on the one hand and of overinvestment on the other hand are both to be avoided. For the new business which finds the problem of raising funds a difficult one, every effort should be bent toward reducing the investment in fixed assets to a minimum. Probably the most frequent error in judgment for promotions which involve new products appears in this item. This weakness may be due to the temptation to be grandiose when the funds are being sought from the public. The chief problem for such a business is generally in the field of marketing, and both administrative and financial problems can often be reduced by having manufacturing processes carried on by others. Once the marketing problem has been successfully attacked by the business, the financing of fixed assets to carry on its own production can be more readily solved. The new, untried business has the greatest difficulty in raising funds. Possible reductions in fixed assets needs may result from the following:

1. Elimination of land and buildings, if suitable quarters can be rented.
2. Elimination of machinery and equipment, if manufacturing can be contracted out to other concerns.

3. A partial elimination of the foregoing assets where parts are manufactured by others and only the final assembly is carried on by the business itself.

Sometimes a community may donate a land site and promise property tax concessions to attract a manufacturing venture.[9] Occasionally local business interests will invest in a new concern to induce its settlement in their city.

An increased fixed investment and the diversion of administrative attention from marketing problems may be justified in the initial stages of the business if it can be shown that production of the product by outsiders is likely (1) to impair seriously the quality of the goods, (2) to hamper the prompt delivery of goods to customers, or (3) to permit potential competition by allowing outsiders to become familiar with special or secret processes. If, however, the marketing problem can be solved first, the initial financing problem is minimized and the energies of the promoters are concentrated where they can be used most effectively; in addition, a basis of success can be established that will make the later financing of fixed investment much easier and presumably cheaper.

II. *Intangible investment.* The amounts which will have to be spent upon intangibles in order to establish the business are among the most difficult to estimate, save for the strictly organization expenses, which include the legal fees, taxes, and like items attendant upon securing the corporate charter. Promotion expenses include the compensation of the promoter for his own personal effort plus his expenses in investigating and assembling the business. Concerning the actual cash outlays of the promoter, little need be said save that they are often a considerable sum, though they should always be kept in proportion to the size of the proposed venture. Where large sums are to be involved eventually, careful investigation and, if necessary, substantial expenditures for that work are justified in order to minimize the risk of failure.

Determination of the promoter's personal compensation is more difficult. Not only must suitable allowance be made for the time, skill, and judgment required to organize and promote, but the risk factor also must be considered. The latter element finds expression in the effort and money spent by even the skillful promoter upon enterprises which never come to successful fruition. The successful ventures should be sufficiently remunerative to balance the expenses

[9] Thus, a Middle Western city donated a 25-acre site worth $3,750, sewer and water extensions amounting to $11,250, and a switch track valued at $10,000 to attract an electrical appliance manufacturer. Also note the inducements offered the Carrier Corporation, manufacturers of air-conditioning equipment, to move to the plant of the former H. H. Franklin Manufacturing Co., automobile manufacturers, at Syracuse, N. Y. *Barron's,* October 25, 1937, p. 32.

and efforts lost on those which do not come to completion or do not succeed. Dewing suggests:

> "Custom seems to have decreed that about 10 per cent of the common stock is a fair compensation to the promoter if he merely conceives the enterprise, and renders only advisory services to the banker who forthwith assumes the constructive activities of promotion. Where the promoter combines the functions of inventor, promoter, and banker, he may even take 51 per cent of the entire capitalization as his compensation."[10]

As an indication of his sincerity and faith, the promoter is likely to be obliged to accept the larger share of his compensation, over and above his actual out-of-pocket expenses, in the form of the common stock of the enterprise. Since those promoters who are to remain active in the affairs of the corporation are likely to wish the intangible assets to be small and so permit a better showing under their administration, they may accept little or no direct compensation in cash or stock. They count as a part of their compensation the opportunity to earn a substantial salary and to receive a high return on their cash investment, and sometimes even the prestige and position which go with control of the business.

The third intangible, the operating losses occurring while the business is developing to a self-supporting basis, also creates an additional need for funds. Such losses are most prolonged and significant for two types of business: (a) those which require a large capital investment which must have an initial size sufficient to care for a developed load much greater than can be utilized at first, because to build the system up by small bits is impractical, and (b) those which require a considerable period for the development of their market because of the novelty of the product. The first type is illustrated by a manufactured gas or an electric light and power plant, which must install generating capacity adequate to care for the market which may take a few years to develop. For such a business it is more economical to bear minor operating losses and inadequate return on capital than to bear the higher operating costs which would result from the less efficient piecemeal construction of a number of small-capacity generating units. In the case of novel products, time is required to familiarize the market with their

[10] A. S. Dewing, *Financial Policy of Corporations* (New York: Ronald Press Co., 3rd rev. ed., 1934), p. 264. This writer also summarizes material from a survey of public utility commission decisions in the matter of allowing stock issues to promoters for services. These decisions vary from decisions which disallow any issue for that purpose to those permitting as much as 6t per cent, the most common allowance being from 2 to 21 per cent. It is also noted that the promoter of a new national bank cannot receive any compensation, and that subscribers to the stock of such a bank must affirm that they have neither paid nor promised to pay any commissions for securing their subscriptions. *Ibid,* footnote j, pp. 262, 263.

merits. Selling expenses are relatively high for the amount of business secured at first, but they are regarded as being recouped from the profits on later sales, which in part grow out of the reputation created by this early missionary effort.

With regard to these expenditures for intangibles, the accounting treatment may be contrasted with the financial point of view. Promotion and organization expenses are either carried in the accounts as an asset of the business for a very limited time or not at all.[11] The general rule is to write them off at once, or within a period of not more than from three to five years. The usual reason for not writing off these amounts at once is the expedient one of allowing time to pass so that there may be earnings to prevent the write-offs from creating a balance sheet deficit. When paid-in surplus has been created at the outset, it is unnecessary to defer the writing off for this reason. The accounting rule for the treatment of operating losses occurring in the development stage is even stricter and does not allow the option of carrying them as an asset even though it should appear disadvantageous to charge them off at once.

From the financial point of view all of these expenditures or losses are necessary outlays drawn from the investors' funds in order to start the business and are thought of as so much intangible investment. If the business is to be regarded as a practical success, it must earn a fair return, not merely upon the tangible assets shown in the balance sheet, but upon these intangibles as well. Since the rate of return earned by a business is ordinarily computed in relation to the tangible investment reported in the balance sheet, an overstatement exists to the extent that there are unrecorded intangibles which represent an actual cash outlay.[12]

In the case of the utility industry the earnings are supposed to be so regulated as to permit only a fair return upon actual investment, and the failure to include the outlay for intangibles simply because it does not appear as a balance sheet asset under conservative ac-

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[11] Thus, Kester supports the idea that legitimate organization costs should be capitalized (that is, set up as assets) and written off in from three to five years. Roy B. Kester, *Accounting Theory and Practice* (New York: Ronald Press Co., 2nd ed., 1925), Vol. II, p. 365. Montgomery advocates that all such expenses be charged off as they are incurred. R. H. Montgomery, *Auditing Theory and Practice* (New York: Ronald Press Co., 5th ed., 1934), p. 299. In income tax matters, however, the authoritative position is that organization costs are not a charge to current revenue or a current loss but are a highly permanent asset. W. Paton, editor, *Accountants' Handbook* (New York: Ronald Press Co., 2nd ed., 1932), p. 1101. See Chapter 21, below, for further discussion of the valuation of intangibles.

[12] As far as the authors are aware, the significance of this third type of intangible investment has been studied only for public service corporations, where, to the extent that it is legally established, it creates an investment value to be added to the tangible property in arriving at total "invested capital," upon which the corporation under regulation is allowed to earn a fair return.

counting practice would work an injustice to the investor. For that reason the concept of *going concern value* has been introduced to include such items as organization and promotion expenses and any operating losses or amounts by which the utility failed to earn a fair return during its early existence whenever such items have not been otherwise allowed for. This value does not appear in the balance sheet but may be allowed for in regulatory practice. Such costs are necessarily incurred by any business to bring the investment up to the point where a normal going concern exists. [13]

The foregoing method of arriving at the financial needs of a business is called the balance sheet method, for it builds up figures such as will appear as the balance sheet assets. Another method, which should be used as a supplement rather than as an alternative, is the cash budget. Such a budget is a forecast of the cash receipts and disbursements by months. By accumulating the cash deficiencies, excluding from the receipts any sums to be raised by financing, up to the month in which receipts are expected to exceed disbursements, the financial requirements of the business are found. To this figure for the maximum accumulated cash deficiency a sum would be added for the normal cash balance to be kept on hand. The cash expenses for promotion and organization and the money spent for fixed assets would appear among the disbursements in the initial months. Cost of merchandise and supplies and the various operating expenses would appear in the several months as they were planned to occur in accordance with the schedule of expected production and sales. The receipts, if the business grants credit to its customers, will follow the actual sales after an interval, and suitable allowance would have to be made for slow collections and bad-debt losses. [14]

Verifying the financial estimates. After the estimates of financial requirements have been completed by those in charge of the

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" Going concern value should not be confused with goodwill. The latter, which is discussed in Chapter 21, constitutes the capitalized value of any earning power in excess of normal return upon actual investment. Since regulation is intended to prevent any such excess return, goodwill should be nonexistent in the utility field. Yet some definitions of going concern value make no clear distinction. Thus, it is defined negatively by Nash as "the difference in value existing between a plant in successful operation and a similar plant assembled but not yet functioning." L. R. Nash, *The Economics of Public Utilities* (New York: McGraw-Hill Book Co., 2nd ed., 1931), p. 162. For a similar definition, see R. H. Whitten and Delos F. Wilcox, *The Valuation of Public Service Corporations* (New York• Banks Law Publishing Co., 2nd ed., 1928), p. 1347. Further discussion of going concern value may be found in Paton, *op. cit.,* pp. 801-805.

[14] An illustration of that portion of the cash budget having to do with the circulating capital or the two current assets, inventory and receivables, is given by C. W. Gerstenberg, *Financial Organization and Management* (New York: Prentice-Hall, Inc., 2nd rev. ed., 1939), pp. 442-445.

For a discussion of the budgeting of cash and working capital requirements in the ordinary course of business, see Chapter 18.

promotion, an investigation or checking up will presumably follow by those who are to supply or find the supply of money for floating the venture. Because of the enthusiasm and natural bias of those directly connected with the promotion, a competent independent check is always necessary. Sometimes an attractive proposition will be offered for which the investigation work has been very inadequately carried out, and verification will take on the attributes of an original investigation. Two methods of verification are possible. The first is that of common sense, a rough study of the situation by qualified experienced parties to determine whether the scheme is plausible; and the second, which would be employed where the proposition has passed the first test, is the statistical method suggested for use by the promoter group in its original study. As regards the former, an experienced person in any given field of business is likely to be aware of major pitfalls. The practical difficulties of a given business are known, and the crucial points upon which success or failure is likely to hang are readily discerned and weighed. Except when the venture is an entirely novel one, experience enables the direction of attention to major points and prevents a waste of valuable effort upon detailed verification by throwing out the obviously impractical.[15]

The use of statistical material from going concerns in situations analogous to that of the proposed business has already been discussed. Such data are business experiences reduced to figures which describe the relationships in the form of ratios, percentages, averages, or similar statistical devices in expressing the normal and measuring the likely degree of deviation from that normal. An array of figures of this type may overimpress the reader. Important differences in such matters as management and location are constantly creating differences between the "standard" conditions pictured by the statistics and the probable situation of the promotion. A combination, then, of experienced judgment and statistical background is invaluable in arriving at a tempered conclusion about the project submitted.

Assembly: the third step in promotion. The last step in the promotion consists of assembly, or bringing together the necessary personnel, property, and money to set the business in motion. The selection of suitable personnel is not a financial problem, but it is

[15] The value of experience is illustrated in Gerstenberg's analysis of an electric interurban railway promotion. The figures submitted by the promoter for investment on a per-mile basis and for the gross revenues were not unreasonable, but the car-mile cost of operation, although supported by detailed figures, ran only about one half of the amount customarily set as a minimum. The result of such a large correction in the operating figures made the project utterly impractical. Such standard comparisons would be available to the person capable of using the methods of statistical analysis. Gerstenberg, *op. cit.,* p. 34.

of such first-rate importance that it should receive close attention in the financial investigation. Very often an examination will reveal personnel so lacking in suitable background in the field of the enterprise as clearly to indicate probable failure.

Financing the promotion. Financing is sometimes spoken of as a distinct step in promotion apart from assembly, but it appears more appropriate to consider it as one of the elements—namely, the uniting of the necessary funds with the other factors which will create the going business. The influence of the kind of business upon the type of securities likely to be employed in the financing has already been outlined in the preceding chapter. As to the manner of raising funds for a strictly new enterprise, only two types, the public service and the real estate corporation, regularly and customarily appeal to the general public for their funds at this stage. In both cases the tangible property is of first-rate importance, and the earning power is relatively predictable. Promoters of such ventures are likely to have been associated with similar ones in the past and so have had opportunity to demonstrate their ability.

General public participation is but rarely sought by large and legitimate promotions in the other fields while the business is new and untried. When the exceptional case does arise, its speculative quality should be clearly recognized and both the sponsorship and the promotional estimates should be given the most careful scrutiny. The previous record of those associated with the promotion is a matter of prime importance. In general, when a promotion in any of the several fields other than the public service and real estate is too large for the promoter and his immediate business associates, an appeal is most logically directed to businessmen and capitalists of means, who are in a position to weigh the situation with judgment. If it is assumed that the venture is sound, this approach is sensible from the business side because the funds can be raised in larger amounts and with less expense than when the money is raised in small bits by the direct sale of securities to very small investors and speculators. From the social side, this course is reasonable because it places risk with those able to bear it and submits the financial plan to those with sufficient experience and discrimination to check upon the work of the promotional group. Such independent criticism may be invaluable to the latter.

The inducement to the prospective financial interests is, in the first instance, high return upon investment. Later, possibilities of advantageous participation in subsequent financing may arise if the business grows and prospers. Sometimes a chance to sell the purchased securities at a substantial profit, as distinct from the hope of a return from dividends, acts as the inducement. Should a very high return upon original investment crown the promoter's hopes

with success, the value of the stock may rise to a correspondingly high figure as compared with the original cost. But sometimes a venture will appreciate in market value even before earnings appear, as in the case of an oil well gushing for a prospecting company, a mining property going into production, or the first successful marketing of a new patented product.

Assuring control of promotion. An important consideration in the work of assembly, if the promoter is to be certain of maintaining his place and his compensation, is that he assure his control until his work is completed. If he does not do so, other persons may go over his head and develop the business opportunity presented, simply ignoring his efforts. When the promoter has spent both money and effort in preliminary work, such a loss of control might result in a serious direct money loss as well as the prospective one in the hoped-for profits. Control results from securing the legal position which will prevent persons other than the promoter from carrying through the proposed project. Patents, copyrights, leases, options to purchase or to lease, franchises, contracts for services, or contracts to promote may provide the necessary assurance of control.

1. *Patents and copyrights.* In this country a patent is a monopoly right granted by the Federal Government to control a new invention and its manufacture for a period of 17 years from the date the patent is granted. Renewal is impractical, since it is to be had only by special act of Congress. Ideas, as such, cannot be patented; only a novel device by which an idea can be carried into effect may be patented.[16] Therefore patents are usually the basis for a protected manufacturing business. However, a peculiar store layout, which depended on certain fixtures, as in the case of the original Piggly Wiggly stores, might obtain patent protection and so form the basis for a merchandising venture. A special method of treating ore might make possible the utilization of mineral deposits formerly without commercial value and become the basis of a mining venture. In both of the two latter cases, the invention is of the kind which might be turned over for operation to other concerns under a licensing contract providing for the payment of a royalty as compensation for the use of the patent. Such a procedure would enable the concentration of effort upon securing users in a large way and avoid any major problems of financing a large investment in fixed assets.

Copyrights, like patents, confer a monopoly privilege upon suit-

[16] The difficult problem of protecting and selling a business idea is discussed by Marvin Bower, "The Merchandising of Ideas," *Harvard Business Review,* October, 1930, pp. 26-34. A form of agreement based upon a deposit of cash in escrow by the purchaser and a provision for arbitration of compensation is given. See also Milton Wright, *Inventions, Patents and Trade-Marks* (New York: McGraw-Hill Book Co., 1933), especially Chapter III.

able registration with the Federal Government but are granted to the creator of an artistic or literary production instead of to the inventor of a device. Copyright protection is for a period of 28 years and is subject to renewal for another period of equal length. It is not usually a device for assuring control in promotion, although it is very important in protecting certain lines of business, such as book and music publication and motion pictures.

A study of a patent is partly a legal and partly an engineering problem. Attorneys who have specialized in this field are ordinarily employed whenever the patents are momentous enough to call for financing of any significance. The problem is to create a patent description not in conflict with any previous patents and which will be broad enough to prevent modified forms of the device from entering the market as competitors. From the standpoint of such protection a broad basic patent covering all possible forms for developing an idea such as the telephone, the steam engine, or the internal combustion engine is ideal. Most patents of commercial value, however, are probably mere modifications of such a basic idea and so are more likely to offer opportunity for substitute devices that achieve the same result. Engineering skill is employed to ferret out such substitute possibilities and guard against them either by expanding the patent claims or patenting the substitutes also. The common method for extending the life of patents, where possible, is the later invention of improvements which will continue to keep the original patentee in a protected position.[17] Another method designed to give partial protection to a business after the expiration of original patents is the development of trade names and special quality difficult to duplicate.

A brief study of the records of the patent office reveals all manner of freakish and amusing devices. From a promotional angle absurd patents are less of a hazard than two other classes—namely, the patents which are commercially impractical because of high production costs or because they are unmerchantable or merchantable only after the expenditure of excessive amounts for selling. A labor-saving device is uneconomical no matter how ingenious its construction if its original cost is so high that the expense of operation, including depreciation and interest, is more than the value of

[17] The original patents of the Gillette Safety Razor Company expired in 1921, and, although patented innovations were introduced, the company's subsequent profits undoubtedly rested upon the trade name built up during the original patent period rather than upon the new modifications. The greatest period of prosperity for the company ensued. In the first 17 years of Gillette's existence, 15 million razors were produced, but from 1921 to 1929 more than 100 million were sold.

For a description of the United Shoe Machinery Company, which was founded on the basis of shoe machinery patents and continued its favored position through patents of improvements, see *Fortune,* September, 1933, p. 34.

the labor saved. A chemical process may be entirely satisfactory from the laboratory standpoint but too expensive in operation to produce on a commercial basis.

In the field of mechanical and chemical invention attention is often so concentrated upon production costs that the equally important matter of marketing costs is neglected. No general formula can be laid down for the detection of those cases in which marketing expenses would make necessary a selling price so high as to prevent the development of a worth-while demand. The matter is one which calls for marketing rather than financial principles. Three suggestions are appropriate for illustrative purposes. When the market is scattered and made up of but a few prospective buyers, so that selling effort will be relatively large, then a product of low unit value will be handicapped as compared with one of high unit value. Buyers are quite apt to resent a price which too obviously includes a very high proportion of selling expense as compared with production cost, even though the selling cost is justified by the difficulties of marketing the product.

A second factor which will render marketing expense relatively high is the absence of near-term repeat sales. In this, respect, automobiles are at a disadvantage as compared with gasoline, and pianos as compared with automobiles. When the repeat sale comes in connection with an accessory that sells at a price that is sufficiently high in relation to the price of the original article, it has the same business value for sharing the marketing expense as a repeat sale of the original product. Thus the sales of razor blades which follow the sale of a safety razor to a satisfied customer give the safety razor an advantage in bearing marketing expense over the straight razor and the electric razor, which have no repeat sales and must bear all of the original selling expense. A safety razor manufacturer might even find it advantageous to give away his product, regarding its cost as a selling expense to be borne by later blade sales, if he were certain that he would gain thereby a sufficiently larger number of successful trials for his product.

The third factor which may increase market resistance and so marketing expense is the absence of self-advertising qualities. If the original sales place the product where it will create customer demand, the high cost of selling during the development period need not be a fatal handicap. Automobiles, because they are so obvious and visible, have had a marked advantage in this respect. Concealed plumbing devices and material for insulating the walls of a house against outside changes in temperature will serve as examples of the opposite sort.

In concluding this topic of commercial practicability, no better general advice can be offered than that those interested in market-

ing patented products analyze the principles of marketing involved and consider the principles found in the financial records of analogous situations, particularly in the earlier years, when development was going on.

2. Options. Options have been suggested as another means of controlling the destinies of a proposed business. An option in this sense is a legal privilege to purchase or acquire real estate or some other property right upon the performance of the stipulated terms, ordinarily the payment of a sum of money. An option may be obtained for a nominal consideration or it may cost a considerable sum, which would represent a serious loss to the promoter if he failed to exercise the option before its expiration date.[18] Thus, if a particular location were essential to a promotion, an option to purchase that site for $25,000 cash might be acquired for $2,500, and the privilege might be good for a period of one year. The cost of the option might or might not apply upon the purchase price if the option were exercised, but it would normally be forfeited in case of nonuse. The promoter must keep in mind that with options he is engaging in a race against the expiration date.[19]

When additional assurance as to the performance of the terms of the option is desired, the instruments necessary to the execution of the object may be drawn up and deposited in escrow with a trustee, usually a trust company. The holder of the option is then fully assured of prompt completion of the arrangement as soon as he decides to take the steps agreed upon for the exercising of his rights. Thus, there might be deposited stock certificates or a deed to a parcel of real estate to be delivered upon the payment of certain monies by the promoter.

3. Leases. When the property essential to the promotion is real estate, its control may be obtained by a lease rather than by outright purchase. Such a lease might be accompanied by an option to purchase. Because a lease would bind the promoter to rent payments for a long term, an option to lease might better meet his needs in some cases. Some leases merely bind the lessee to a contingent rental, as in the case of leases for the purpose of exploiting mineral resources. Farm land might be leased for oil drilling and development at a rental of one eighth of the crude oil brought to the surface, the lease to be void if drilling operations were not carried out before a certain date. Were competition for leases suf-

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[18] Thus, Henry Frick failed to obtain the necessary funds to exercise his option on the Carnegie plants just before the formation of the United States Steel Corporation. Gerstenberg, *op. cit.,* p. 38.

[19] For an illustration, see the statement of the facts in the case of Haskins v. Ryan, 75 New Jersey Equity Reports 330, reproduced in C. W. Gerstenberg, *Materials of Corporation Finance* (New York: Prentice-Hall, Inc., 5th ed., 1924), pp. 489-495.

ficiently active, a cash payment or bonus might be necessary to obtain such a lease. After production had been established, such a lease would have a value to the lessor equal to the discounted, or present, value of his one eighth of the estimated output.[20]

When a lease is terminable after a period of time, the landlord might be in a position to exact onerous if not unfair renewal terms were the tenant business wholly unprotected. Remedies for such a situation are the inclusion of terms in the original lease that will (1) insure possible renewal on favorable rental terms, (2) provide for so long a term—say fifty years or more—that termination has little immediate importance, or (3) grant the lessee an option to purchase at the end of the lease period. When a renewal of the lease is provided for, the future rental might be a definitely stipulated amount or a percentage of the sales, or it may be made the subject of arbitration by the lessor's and lessee's representatives and a third party chosen by these two representatives.

4. *Franchises and concessions.* A franchise, as the term is employed in financial circles, is a privilege granted by the government to operate one of the public services, such as an electric light and power, gas, water, street railway, bus line, or telephone system. Generally the grant permits the use of public property and is monopolistic. Such privileges are usually hedged with restrictions and may require annual payments to the political unit granting the franchise.

A central feature, from the financial point of view, is the life of the franchise. The expiration of a limited franchise may be made the occasion for unfair exactions as the price of renewal. The corporation with a large investment committed in fixed form is in a weak bargaining position. With adequate commission regulation to guard the public and a suitable initial franchise, these periodic hagglings may be eliminated by the now commonly favored indeterminate franchise, which is good as long as the beneficiary of the franchise lives up to its requirements.

In some states a franchise is no longer granted by a legislative action, but the promoters are required to apply to the public service commission, which, after examining the financial arrangements and the likelihood of the venture's serving an economic need, grants a certificate of convenience carrying the right to operate and also gives its permission for the issuance of securities.[21]

Concessions, whether private or governmental, are close kin to lease arrangements. A private concession might be granted by the

[20] Adams Royalty Company is an example of a concern formed for the purpose of dealing and investing in such lessors' royalty interests.

[21] For a more complete description of utility franchises, see Nash, *op, cit.,* Chapter III. Certificates of convenience and necessity are discussed in *ibid.,* Chapter VI.

management of a baseball park for the sale of beverages, by a bus line for its advertising space, or by a municipality for conducting some business on city property. Such an arrangement may call for a stipulated sum or a percentage of the volume of sales. Under either the lease or the concession, the problems of operation and finance are shifted to outsiders by the owner of the site. When the consideration for a concession is a percentage of the revenues or of the profits, some minimum guarantee may be required to limit risk for the grantor of the concession and guard against too great incompetence or mishandling.

Concessions of the public variety are frequently grants permitting the development and exploitation of mineral deposits in those countries which regard subsoil rights as belonging to the state and not inuring to the owner of the surface. Promotions of this sort are mining ventures, but they may suffer the disadvantage of being surrounded with political difficulties. Owing to the dubious methods by which such concessions are sometimes acquired and held, the term *concession* is often in disrepute. The governmental match and tobacco monopolies in certain countries are examples of situations which might be turned over to private interests as concessions. The ill-fated Krueger and Toll Company was built upon match monopolies which were obtained in exchange for interest-bearing long-term loans to governments in distress plus an annual royalty.

5. *Contracts for services.* Control of promotion may be obtained through contracts for services. If the success of a business hangs upon the services of certain individuals with a special skill or talent, these persons may contract their services to the proposed corporation contingent upon the success of the promoter in carrying through the financial and other arrangements within a certain period of time. To protect the capitalists in such a promotion for outlays which would be lost through death or incapacity of these important persons, suitable life, health, and accident insurance, payable at first to the promoter and later to the promoted corporation, might be utilized as protective devices.

While contracts to promote bind the services of the promoter and specify his compensation, they are more significant in what they give to the promoter. They give him exclusive control of the promotion and are made with the parties who control the patents, real estate, or securities which are the strategic factor in the enterprise. An unscrupulous adventurer might utilize such a contract to tie up a situation with no intention of promoting, hoping that it will be necessary for others to buy him off in order to carry forward the project. A well-drawn contract should not only protect the promoter but also those for whom he is putting forth his effort, in case that effort should prove unsuccessful or too protracted.

Legal Aspects

Promoter's responsibility. While the promoter's responsibility is largely a matter of legal definition, the student of finance should appreciate something of the difficulties involved. The promoter is the creator of the corporation acting like an agent of that corporation and bringing other persons into relation with it through contracts, but he may call himself an outsider in making deals with it himself. The problem is to prevent those who are organizing or assisting in the organization of a corporation from abusing their position of trust to make fraudulent profits at the expense of those who supply the funds.

Legal rules to attain this end are as follows:

1. Promoters may not make secret profits at the expense of the corporation.[22]
2. If profits are sought, a full disclosure of all material facts must be made to each original subscriber to shares of the corporation, or a full disclosure of all material facts may be made to the corporation directors after the organization, and they can ratify or adopt all the contracts made by the promoter for acquiring property or engaging services. The disclosure of the promoter's profits must be specific as to the amount involved.

Failure in this matter of frankness lays the promoter open to either of two actions. The contract by which he obtained the secret profits may be rescinded, and the cash or stock given in payment may be recovered by returning the property received by the corporation, or the contract may be allowed to stand and a suit may be instituted for a recovery of the profits and any other damages suffered. This responsibility of the promoter extends even to contracts where he permits third parties to make unreasonable profits, so that the corporation can, if it chooses, hold the promoter for damages to the extent of unreasonable amounts paid to third parties.

The weakness of attacks on promotional fraud under the common law is due to the domination of the organization by the promoter. The original directors may be of the "dummy" variety, and disclosure may mean nothing in terms of protection to later purchasers of securities. The promotional group may even make

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The common-law definition of a promoter has been one taking "the initiative in founding and organizing the enterprise." But the Securities and Exchange Commission, in requiring full disclosure of relationships in the matter of profits and deals with the new corporation, includes anyone who has received 10 per cent of any class of securities for services or for properties if the person has taken a significant part in the organization of the company. A person for whom any promoter is acting must also be named as a promoter.

themselves the original subscribers of all the initial stock, donating it back for possible resale to raise cash. The law, again, is of little protection save to the well-to-do capitalist, who should be in a position to make an initial investigation that would largely eliminate the possibility of promotional fraud.

For the protection of the less skillful and less affluent speculator and investor, for whom litigation is at best a doubtful remedy, the "blue-sky" laws, now found in most states, are designed to afford partial protection. Such laws are intended to prevent the sale of the "blue sky" to the unwary as an investment. Similar ends are sought by the Securities and Exchange Commission—namely, the prevention of fraudulent promotions and an adequate disclosure of pertinent information in all other ventures offering securities to the public. Customary provisions of state "blue-sky" laws are as follows:

1. Publicity.
   (a) Personal record of promoters, officers, and directors.
   (b) Financial record, if any.
   (c) Amounts paid in for any 'stock other than that sold for cash.
   (d) Contracts for compensation to promoters.
2. Percentage limitation upon commission which may be paid to salesmen for selling stock.[23]
3. Requirement that the character of securities be clearly indicated by such labels as "speculative," "junior mortgage," and so forth.[24]
4. Exemption of certain securities from this regulation when they are listed upon recognized security exchanges, passed upon by some other regulatory body, such as a public service commission or banking department, handled by established investment bankers, or are of a certain type such as state and municipal bonds.

The work of the Securities and Exchange Commission has been limited to securing full disclosure of material information (point 1 above), but this work has been prosecuted with such thoroughness and energy that stock-jobbing promoters of the fraudulent type have been generally discouraged from the federal registration of their issues.

Thus, in Illinois the charge made for selling securities in Class "D" through solicitors, agents, or brokers may not exceed 20 per cent.

" Thus, Illinois real estate bonds, if they are junior mortgages, leasehold mortgages, or construction loans, must be so labeled in large red type. Certain issues, such as those without a record of earnings, must state on their face, "These securities are speculative."

Summary and Conclusions

Although the term *promotion* includes founding and financing of mergers and other combinations of going concerns, this chapter has confined its attention to the problems of initiating a new business. Many of the problems of this phase of business are more than financial. After the venture has been conceived by the promoter, careful investigation must be made to ascertain financial needs and profit possibilities. If the analysis indicates that the probable profits are sufficient to warrant the required investment, the promoter attempts to assemble the required personnel and property. To the extent that the property factor means raising cash, there is a corporation finance problem. The general factors governing the form of capital structure were indicated in the preceding chapter. The general practices of various types of business after the initial stage—that is, as going, expanding concerns—are discussed in the immediately succeeding chapters. The chief differences that affect the financing of the new business, as distinct from the established one, are the greater uncertainty or risk, which is due to its untried character, and its generally small size. The risk factor explains why a stock issue rather than a bond issue is so much more appropriate and customary in this stage of the business, except in the case of public service corporations. Where priorities must be established, preferred stock is more logical than bonds. Because of the uncertainty and the consequent difficulty of obtaining funds, it is sound finance to employ every means possible to reduce the amount of funds to be raised. After .the initial stages, a record will be established as a basis for increasing the assets. Furthermore, the factor of small size tends to bar the new business from many of the customary channels of financing, such as the investment banker.

The new business, then, is likely to be marked by uncertainty and small size, which makes funds hard to raise. If the promoter or founder lacks funds, he is most likely to find them among those who are intimate with him in a personal or business way. The more novel the business and the greater the hope of large return, the more logical it is to minimize initial investment and expand from later earnings. The more the business resembles existing business units in its pattern, and the more predictable its profits and success appear because of known personnel and markets, then the more likely is the financing to resemble the pattern set by other concerns in the same field and to resort to conventional channels of finance that draw on the funds of the general investing and speculating public.

CHAPTER 11

FINANCING OF ESTABLISHED INDUSTRIALS

AFTER the new business has been promoted and brought to the stage of a going concern, it begins to make a record that makes it easier to decide upon a suitable financial pattern. The beginnings of most small businesses, especially in the industrial field, are obscure and difficult to discover, but individual cases reveal such varied practices that generalization is impractical. Such variety is to be expected under an economic system that allows individual enterprise free scope and where the skill, associations, and financial means of business founders are so diverse.

Industrial Capital Structures

Meaning of "industrials." When we turn to the established business, a clearer picture of financial practice is obtainable. Especially is this true in recent years, when, with increasing public participation in the financing of business, financial reports have become more common and more detailed. Governmental agencies and research organizations have added to the fund of information. Financial data are most readily available for the larger corporations, which are of the widest public interest. The largest group of corporations is made up of the "industrials." This term, often colTATiel7Ereuverffe mffiiiffglifiig incIUSTHes, is now commonly applied in financial circles to almost all private profit-seeking businesses except railroad and public service corporations, the financial companies and real-estate ventures. Industrials are in this sense, which we shall employ predominantly the manufacturing, merchandising, and extractive enterprises. This heterogeneous group—representing by far the greater investment and a very much larger number of corporations than the so-called public utilities or the railroads.

Partly because of their major importance and partly because of their generally more simple capital structures, industrial corporations will receive our attention first. Utility and railroad financing will be discussed in the succeeding chapters. The unusual emphasis and space devoted to the two latter fields in the literature of corporation finance may be attributed to the fact that industrial securi-

ties did not come into the hands of the public until more recently and their less complex financial arrangements provided less to write about.

Types of securities used. An examination of the balance sheets of 500 leading industrial corporations was made early in 1937 for the purpose of discovering the types of securities used in their capital structures.' The results shown in Table 7 support the general feeling that a structure solely of common stock is the most usual of the four possible forms of capital structure, one third of the total being in that classification. The data do, however, upset the widely held belief that preferred stock issues are more usual than bonds. The belief would seem to be justified by the risk of a fixed burden of debt to an industrial, so that preferred stock would seem more logical, but among these larger companies bonds and preferred stock occur with equal frequency.- Furthermore, a surprisingly large number, one fourth of the total, have both bonds and preferred stock in their structures at the same time.

TABLE 7

FREQUENCY OF VARIOUS CAPITAL STRUCTURE TYPES AMONG 500 LEADING INDUSTRIAL CORPORATIONS

	Number	*Per Cent*
Common stock alone	163	33
Common stock together with:		
Bonds	106	21
Preferred stock	106	21
Both bonds and preferred stock	125	25
Total	500	100

While these figures show the frequency of occurrence, they do not indicate to what extent industrial corporations depend upon each of the three forms of security. Many 'companies have gradually reduced their senior obligations until they are small or negligible, but such cases are nevertheless included among the concerns using bonds or preferred stock. The necessity of keeping this fact in mind in reading the table is emphasized by the figures which show the proportions of the three kinds of security in the combined capital structures of industrials.

The combined picture of American industrial corporations as they report to the Treasury Department in connection with their income tax returns is shown in Table 8 in a comparison with public utility and railroad figures.

The corporations were those whose stock was active on either the New York Stock Exchange or the New York Curb Exchange. Since they were tabulated early in 1937, the figures would for the most part represent 1936 capital structures. This sample of 500 included virtually all the leading American industrial stock publicly held.

The less common use of debt by the industrials than by the public service groups, and the somewhat greater use of preferred stock, is brought out by these figures. Common stock and surplus constitute approximately three fourths of the combined industrial capital structures. These composite figures represent a wide variety of practices, and the percentages should not be thought of as showing the

TABLE 8

COMBINED CAPITAL STRUCTURES OF INDUSTRIAL, UTILITY, AND RAILROAD CORPORATIONS, 1933
(dollars in billions)

	Industrials		*Utilities*		*Railroads*	
Bonds	$10.6	14%	$12.0	40%	$11.7	44%
Preferred stock.....	9.7	13	3.6	12	2.0	8
Common stock..	39.2	51	11.4	38	8.1	31
Surplus	17.5	22	3.1	10	4.5	17
	$77.0	100%	$30.1	100%	$26.3	100%

Source: Moody's *Manual of Investments, Industrials,* 1935, p. 40a (compiled from U. S. Treasury Department, *Statistics of Income for 1938,* and from Interstate Commerce Commissions reports).
Note: The separation of the net worth items is not exact. where preferred and common stock were reported together as capital stock, the figure was included under the latter figure. Sometimes published reports fail to segregate common stock from surplus; in these cases the whole is included under the former.

most common proportions (mode) to be found, at least in the case of the industrial corporations. It follows that they should not be regarded as "ideal" or as a standard of what financial practice should be. The data leave unanswered the question of what maximum limits are likely to be set upon the issuance of bonds and preferred stock. The total represents a mixture of weak and strong, of large and small, and of all varieties of industrial corporations. It is very heavily weighted with the major corporations.[2]

Some idea of the variations that exist among the capital structures of the major companies in the various industrial divisions may be obtained from Table 9.

One of the most interesting facts about industrial finance is that industries which have suffered the most extreme fluctuations in earnings have been heavy users of bonds. Examples of this practice are found in the major corporations in the fields of meat packing, rubber, iron and steel, and motion pictures. On the other hand, some fields which have enjoyed relative stability of earnings, such as tre 6ffeMicals and the chain stores have used-very little or no

[2] The capital structures of 184 leading industrial corporations for 1928 amounted to $20,400,000,000, or 27 per cent of the total for all reporting corporations. H. G. Guthmann, "Post-War Trends in the Capital Structures of Large Industrial Corporations," *The Annalist,* May 16, 1930, p. 1060.

debt and leaned almost entirely upon the investments of the common

TABLE 9

CAPITAL STRUCTURE PROPORTIONS OF MAJOR CORPORATIONS IN VARIOUS INDUSTRIAL FIELDS, 1935

Industry	No. of Companies	Total of Capital Structures (millions)	Percentages		
			Bonds	Preferred	Common and Surplus
Automobiles	13	$1,306	1	16	83
Chain stores	6	439	7	6	87
Chemicals (industrial)	16	1.293	3	13	84
Iron and steel	18	3,071	15	19	66
Machinery	24	860	6	23	71
Mail order	3	375	3	6	91
Meat packing	4	674	35	13	52
Metals (nonferrous)	13	717	3	1	96
Petroleum	26	6,206	13	4	83
Rubber	9	563	31	39	30
Sugar	8	277	1	27	72
Theater and motion picture	3	278	40	8	52
Tobacco	6	635	9	14	77

Source: Standard Statistics Company, *Standard Trade & Securities,* August 14, 1936, Sec. J.

Use of Bonds

Reasons for industrial bonds. The general objection to bonds that they constitute a hazard to solvency in the event of poor earnings applies with particular force to their use by industrial corporations. However, this risk is assumed when the management is pressed by necessity, when it believes that the cost of financing through the use of stock would be excessive, or merely when the use of bonds appears to be a cheap and easy way of financing ex
When the current earning and the market for the corporation'i stock are depressed, the directors will hesitate to offer common stock for what promises to represent an excessive share of future earnings. Such a situation is most likely to exist in a period of business depression, and at such times it may even be impossible to sell any substantial amount of stock at the quotations reported in the market.

Smaller corporations, the stocks of which are not very widely distributed, are particularly apt to find it more difficult to dispose of stock than a bond issue for a reasonable sum. Investment bankers find that the poor marketability in the case of a small bond issue is

A further analysis of the net worth section of the capital structures for large corporations is found in Arthur H. Winakor, "Financial Aspects of Corporate Net Worth," *Bureau of Business Research Bulletin No. 50* (Urbana: University of Illinois, 1935).

of less concern to most bond buyers, who typically intend to hold their bonds for permanent investment, than in the case of stocks, which are purchased by a more speculative class of buyers, who are apt to dislike the absence of a ready market. The stock buyer wants to see market prices available that will register the appreciation which often counts for as much as, or more than, the dividend income. A ready market is also convenient as a means of recovering at least a portion of one's stock investment if the company and its stock fail to register the progress expected by the speculative purchaser.

A special occasion for the use of bonds arises when a corporation's property is changing hands. At such a time the funds are not to be ratged for the expansion of the business but to permit the purchaser to acquire existing property. The buyer may find that the bonds of a new corporation formed to take over the business, or of an existing corporation acquiring it, can raise all, or a part, of the needed money most expeditiously. Such funds are obtained without any sacrifice of voting control. Bonds appear to the greatest advantage when the purchaser of the property commands a higher credit rating than the seller. If, for example, a large corporation with good credit could purchase the properties of a small one on a 10 per cent capitalization basis, it might be able to finance a substantial part of the cost with 5 per cent bonds (or even a lower rate in a period like the late 1930's). A property earning $200,000 would be worth only $2,000,000 on a 10 per cent capitalization basis. But $2,000,000 worth of bonds at 5 per cent would consume only a portion of the $200,000 added earnings and leave considerable net income to contribute to the margin of safety required to sell a bond issue.

Conventional debt limits. To the industrialist hard pressed for funds to carry out his plans for economic empire, one of the most vital questions is, "How far may debt be incurred?" Because it depends upon the willingness of lenders, whose personal attitudes cannot be measured by any rule, the answer is indeterminate in the strict sense. However, where corporations appeal to a common investment market, customs or practices tend to grow up that serve as empirical rules—empirical because they are subject to no fundamental principle or law that insures their success. Consequently, they may break down whenever there are changes in the conditions that have made such rules-of-thumb work satisfactorily in the past. Whatever their weaknesses, they are like other customs of the community in that they need to be ascertained as accurately as possible in order to avoid the penalties of nonconformity.

While no official pronouncement can be had on the subject of proper maximum debt standards, a study of the literature and the

opinions of those in financial circles indicates the existence of three rules that have fairly wide acceptance. By acceptance is meant that conformity is ordinarily essential in order to obtain investment banking distribution by leading houses and ready salability of the issue among the substantial and well-informed buyers who make up the bulk of the bond market.

1. Limit with respect to fixed assets pledged. When a mortgage is given to secure industrial bonds.,,the common pr_a r'c e is to pledge_ only the real estate—that is, the factory and its equipment, any, office buildings, or any paining property. For this reason such bonds are thouglit of as a lien upon the fixed tangible operating assets, although occasionally some nonoperating assets in the form of investments, and sometimes even intangibles, such as patents, are pledged. If the bondholders were regarded as wholly dependent upon the fixed assets for security without respect to the current assets of the earning power, an important rule F ould be to limit bonded debt to such a fraction of that mortgaged property as might reasonably be recovered by its seizure and sale.

So stated in its bluntest form, the impracticability of the rule becomes clear, because much equipment and plant of the manufacturer has only a very small resale value. The assets are too highly specialized and have but a very limited market. In this respect a small plant might actually be better as security than a larger one, in that the amount of money required to purchase it would be less, and so the possibility of finding a purchaser would be increased. Competitors might find the property suitable for expansion.[4] If the property can be used by other concerns, and this is probably true more often with buildings used for merchandising than for manufacturing, it has a superior marketability that greatly increases its value as security, independent of the success of the business mortgaging it.

In practice, the bondholders of a large industrial corporation rarely seize the mortgage property and attempt recovery by liquidation.[5] Reor anization rather than liquidation of the assets is the ocedure, re7rgrVates rsiarue Caii be developed for them by rsiirg them in the operation of The compromises which the bondholders accept rather than attempt to sell the pledged property are studied in the chapter on reorganization. Their mortgage is chiefly useful as an instrument for bargaining with unsecured creditors and stockholders.

' Where such an arrangement is possible, a merger might be conceived and executed before any default on the bonds occurred.

' For an extended discussion of the difficulties of the bondholder who would enforce his rights literally, see F I Shaffner, *The Problem of Investment* (New York: John Wiley & Sons, Inc., 1936), Book III, "The Fallacy of Safety in Mortgage Bonds."

In spite of the lack of analogy, then, it may be said that it is customary to lay down a rule that limits an industrial mortgage bond issue to a percentage, generally 50 per cent, of the replacement value less depreciation of the mortgaged property. Such a rule will always be supplemented by one which recognizes the importance of earnings. In the discussion of the latter rule, the utility of a limitation with relation to fixed assets is further indicated.

2. *Limit with respect to working capital.* But if the fixed assets are difficult to evaluate and still more difficult to liquidate, t e current assets offer more solid ground. The cash and ma'iketa e -/ ci Ertigi Ea7fes ari immediate and readily ascertainable liquid value. The receivables owing from customers will ordinarily be collected within a short period, and, by making an allowance for bad-debt losses based upon experience, their value may be estimated closely. Even the inventories can be valued with a small margin of error as a rule. With normal turnover, their cost will provide a recent market value figure, and their sale will bring a recovery of cash or an account or note receivable in the near future. When these circumstances are kept in mind, it is easy-to-understand why bond- more certain of the values supporting their claims if- current assets are sufficient to cover all debts, including their bonds. Thisaltita& is summarized in the rule that the bonded debt of an industrial should not exceed the working capital—that is, the excess of gurrent assets over current liabilities.[6]

[2] The utilit Tr cintliii second rule is open to question. The emphasis upon liquidating value which it suggests is at variance with the fact, already mentioned, that liquidation—at least among large companies—is unusual in practice. Moreover, losses can reduce the current assets over an extended period, such as constitutes the ordinary life of a bond. This possibility is less a weakness of the rule than an inherent risk that attends any long-term investment in a business enterprise.

Some might regard this rule as peculiarly appropriate for unsecured debenture bonds and associate the first rule only with mortgage debt, which has a lien upon fixed assets but not upon current assets. This distinction would appear to be doubtful theorizing because very few industrials have more than one important bond issue. If more than one form of funded debt exists, there will usually be but one main bond issue, either mortgage or debenture, and some minor mortgages given for individual parcels of real estate

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The indenture of the United States Rubber Company first mortgage and collateral trust sinking fund 4i's, Series A, of 1958, issued in 1938, provides for the observance of this rule *after issue* by stating that no dividends shall be paid unless net current assets cover the amount of bonds after the dividend has been deducted.

or some small bond issues of subsidiary companies.? In the absence of a major competing bond issue, a mortgage bond has little advantage over a debenture. The mortgage serves chiefly as a safeguard in the event_of-tr.uble by creat,ingiJieritliat-will improvs bargaining position as against any of er creditors=agagIrSr current tors. The iise 6Th7d- • -n ure issue in in • us rial finance is likely to mean that at the time of borrowing conditions were favorable enough and credit standing was sufficiently high to allow the corporation to dispense with the protecting mortgage feature. Such an occasion is likely to occur in a period of strong bond markets eager for new investments and when the record of the company augurs that there will be but a small use of credit following the bond flotation.

Any industrial corporation that has relatively substantial current —as compared with fixed—assets is likely to be able to meet the standard of this second rule if it can meet that of the first. The reason may be seen if a condensed balance sheet is set up with equal amounts of current and fixed assets. I the bonds do not exceed 50 per cent of the ..fixes. wets., tia.en they_cannot, exceecL t e worki capital unless the current debt exceeds one half of the current assets Which is unlikely. Such a high current debt would exist only when the current ratio had fallen below 2 to 1, the widely held minimum standard for credit granting by banks and most short-term creditors.

Current Assets	50	Current Liabilities	
Fixed Assets	50	Bonds	25
		Net Worth	
	100		100

By inserting various figures for current debt in the preceding partial balance sheet, one can judge the likely capital structure proportions for a company with a reasonably large portion of its assets in current form—that is, about 50 per cent. If the corporation is assumed to issue bonds to the maximum under the first rule and to use its current credit to the maximum, the balance sheet will read as follows:

Current Assets	50	Current Debt	25
Fixed Assets	50	Bonds	25
		Common Stock Equity ...	50
	100		100

The resulting capital structure consists of 33 per cent bonds and 67 per cent stockholders' investment. But, if the corporation has

An example of the exceptional is found in the financing of the (B. F.) Goodrich Company. Of an authorized issue of $25,000,000, $20,000,000 first mortgage 61's of 1947, containing the after-acquired property clause, were issued in 1922. In 1930, faced with a problem of liquidating a large sum of current indebtedness, the corporation issued $30,000,000 of convertible debenture 6's of 1945.

only negligible current liabilities, say one tenth of the current assets, the balance sheet will show the following:

Current Assets	50	Current Debt	5
Fixed Assets	50	Bonds	25
		Common Stock Equity	70
	100		100

Capital Structure

Bonds	25	26
Common Stock Equity	70	74
Total Capital Structure	95	100

Here, the larger investment of the stockholders permits a more conservative use of credit, and the proportion of bonds to stockholders' equity is 26 to 74 per cent.

These figures explain why industrial capital structures are not expected to show more than one third of the total in funded debt. This rule follows as a consequence of the rules already given, although sometimes it is stated separately. There is an advantage in drawing attention to the relation of debt to the supporting assets rather than its relation to the stock equity, even though the latter is often easier to derive from the balance sheet. A danger exists, particularly in statistical work, that, when study is directed toward the net worth, the reader may overlook the character of assets which support it. In this way a large net worth supported only by intangible assets or nonoperating assets that require special analysis may give capital structure proportions that are nominally satisfactory but actually weak when they are read in the light of the particular assets.

That rules limiting debt to a certain percentage of the assets are no guarantee against failure should be obvious. The point may be reinforced by the citation of a study of 183 unsuccessful industrial corporations.[8] Their long-term debt increased steadily in relation to total assets throughout the ten-year period leading up to failure. The percentage increased from 17.6 per cent of total assets in the ninth year prior to failure to 23.4 per cent in the sixth year, 27.4 per cent in the second, and 30.8 per cent in the first. The interesting point is that in the years immediately preceding failure, although long-term debt was increasing as a percentage of total assets, it was actually decreasing in dollar amount in the great majority of cases. The trouble lay in the gradual shrinkage of current assets, which are needed to liquidate debt and to maintain solvency.

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[8] R. S. Smith and A. H. Winakor, "Changes in the Financial Structures of Unsuccessful Industrial Corporations," *Bureau of Business Research Bulletin No. 51* (Urbana : University of Illinois, 1935), p. 24.

Some industrials have substantially more than half of their assets in the fixed classification. A large part of such companies will be found in the mining group. The bulk of the asset values among thesebusinesses is in the mineral deposit and the egi.jipxnelt required to work it. After a proi5erfy ha7 Theeh worked, that the riailess and profitableness of the ore body has been demonstrated and the substantial size of the deposit can be checked, as by test drill-holes, funded debt may be used in financing. Large, well-defined mineral s are ilioSt usUal iii coal; copper, and iron rather than in the most valuable metals, which are often taken from veins of uncertain geological extent. The hazards of any form of mining would seem sufficient to ban the use SIVOnds. In common with the other raw materials of inclifS ria s, mine products fluctuate widely in price. Many of them, notably copper and iron, are dependent upon the activity of the construction industries for a market and hence suffer a decline in sales as well as lower selling prices in every depression period.

Perhaps some charm in the thought of a gift of nature stored away underground where it cannot spoil makes investors prone to overlook the hazards. Such wealth does have an advantage over forms of property that deteriorate through mere passage of time or lose value from obsolescence. This vision of the physical imperishability of a store of mineral wealth tends to make one overlook the fact that value can vanish while the object remains. If price fail, the margin of profit over and above production expenses and with it the economic value of the mine to its owners tend to disappear. Even a reduction in output or a shutdown, by postponing profits to the more distant future, reduces present value, which is the discounted worth of the expected future profits. The coal company troubles that began in the late 1920's give point to these generalizations.

Whatever the pros and cons are, maiscompanies in the mining fiendnotably the giarirdirafiTMI, copper, aiid 01 mpanies —have used bonds. The large established oil companies, with tiTir ivereified properties lending strength and certainty to their position, have been frequent users of bonds. What with the flush production of the 1920's, only the extraordinary growth of the automobile industry prevented financial insolvency. The excellent record of the petroleum industry in caring for its fixed obliea Tions was further preserved by the remarkably sustained demand for gasoline during the deep depression of the early 1930's. Closely allied to mining is the timber trade, which in this country is conducted very much like one of the extractive industries. Like a mine, a timber tract is subject to depletion. In addition, it has the risk of forest fire losses.

When these corporations, with their substantial fixed assets, use funded debt, it is very likely to exceed the working capital, even though the issue bears a conservative relation to the fixed assets. The reason is apparent when a balance sheet is set up with a preponderant proportion of fixed assets, as below:

Current Assets	20.....	Current Debt	
Fixed Assets	80.....	Bonds	— L
		Net Worth	

Thus, in the above situation the bonds could not exceed 20 units, or only 25 per cent of the fixed assets, without exceeding the working capital even if no current debt existed. Such a high proportion of fixed assets is uncommon for merchandising and manufacturing concerns, but it is likely to be found in the mining group.

In view of the risks of the extractive industries it is doubtful --sn1stantirst-use-of-66nds -j ustified-except-iff- ncy-ttitartiers7-Tlie misfortuneS-6f the coal and timber trades e eight-t6-this skepticism. The use of debt in a given field is often a matter of accepting a standard initiated by one or two leading concerns. It is of interest that the giant United States Steel Corporation changed its capital structure in 1929 so as to substitute common stock for all but a relatively nominal amount of its large bonded debt.[9] Bethlehem Steel followed along part way in the same direction. This elimination of fixed charges proved a most judicious step in the difficult depression years that followed immediately after. A similar elimination of bonds by some of the leading Standard Oil Companies might mark a new trend in financing for the oil division of the industrial field.

3. *Debt limitation with respect to earnings.* agially.--ii-Luat inore important than the matter of tangible asset support fora propo se and issue is tralt___j_sg_s, Wit out adequate earn-TiraTosupipertIEZTied interest charge, the assets themselves would have to be liquidated to meet that obligation. That course would be possible only to a limited extent, because much of the assets, at least of the fixed group, have only a small junk value save as the means of operating a profitable going concern. Except for the current assets, the asset values are very largely dependent upon the prospective earnings.

Since the most common measure of future prospects is the record of past performance, a common rule is that the earnings in the years immediately prior to the date of nancmg s ou • 13__, a —tern three times e interest charges to be assumed. This 200 per curr-iri-argin provides for the risk of decreased earnings. If the conditions were generally admitted to be abnormal at the time of

[9] This company issued $100,000,000 of 3/ per cent debentures in 1938.

financing and the outlook was favorable for improvement, an industrial whose earnings were too low to meet this rule, but which could show more adequate earnings for normal years in the more distant past, might finance successfully in defiance of this rule. The important factor is *prospective* earnings. The question the bond market raises is: "Can this corporation show a comfortable mar in of earnings in ordinary ears an avoid de au t in the worst years?" T e rueeriiMiling titere to one third cirfe cefit ea,fiiings is merely an approximate method of stating the kind of performance likely to assure an affirmative answer to the question. If the earnings trend of a particular corporation is downward or the general business outlook is gloomy and uncertain, adequate earnings, as measured by the rule, may not be sufficient to allow a sale of bonds?

This willingness to purchase bonds of a corporation with a curJRfatly poor earnings record is illiigrated by-the- f nancing of Ana conda Copper in 1935. After going through the depression with an unusually heavy burdeU of current debt, in 1935 it sold $55,000,000 of sinking fund debenture 42's, due in 1950, at 981, for the purpose of paying off $41,225,000 of its own bank loans and $11,000,000 in bank loans of two subsidiaries. The fluctuating earnings record, as shown below, would not appear at first glance to justify the market's absorption of the issue on such favorable terms. However, the balance for interest charges had risen to $8,330,000 for the first six months of 1935, indicating a satisfactory coverage for the whole year.

ANACONDA COPPER MINING COMPANY EARNINGS RECORD

	1929	*1930*	*1931*	*1932*	*1933*	*1934*
Balance for interest* (thousands of dollars)	78,577	22,874	1,317	11,322d	1,087d	8,289
Interest and discount (thousands of dollars)	8,259	4,091	4,469	5,572	5,735	4,763
Times fixed charges earned*	9.51	5.59	0.29			1.74

d — deficit.
* Before deduction of depletion of mines and income taxes.

The accompanying balance sheet for the end of the year preceding the financing shows a very precarious working capital position, with current debt about equal to current assets. The company was rescued from its position by business recovery and a rise of earning power in 1935 that permitted refinancing in the easy bond market which was getting under way at that time. Industrial bonds were

" This emphasis on "outlook" or "trend" is in effect embodied in the rule of the New York State savings bank law defining those electric light and power bonds which are eligible for investment as those showing interest earned on the average of twice over in the five years preceding and *in the last year* (italics ours). If the average times earned were two or better for five years but under for the last year included in the average, an undesirable near-term trend would be indicated.

coming out with record-breaking low coupons, such as the Swift & Company first 31's of 1950 and the Socony-Vacuum debenture n's of 1950.

ANACONDA COPPER MINING COMPANY

Condensed Balance Sheet

December 31, 1934

(in millions)

Assets		*Liabilities & Net Worth*	
Cash	$ 12	Accounts & Wages Payable	$ 4
Marketable Securities	2	Accrued Liabilities	4
Notes & Accounts Receivable	6	Notes Payable	60
Inventories	48		
Total Current Assets	$ 68	Total Current Debt	$ 68
Developmental, Prepaid, and Deferred Expenses	13	Funded Debt—subsidiary	29
Noted Accts. Rec.—not current	8	Reserve for Insurance, etc.	3
Investments & Advances	30	Minority Stockholders' Interest	5
Mines, Claims, Land, etc. (net)	297	Capital Stock Outstanding	434
Buildings & Machinery (net)	157	Surplus	37
Discount on Bonds	3		
	$576		$576

Adequate earnings should not be regarded as an excuse for disregarding the rule about keeping funded debt in a conservative relation to the tangible assets, as suggested by the first rules. Otherwise corporations earning a high return might be tempted to use bonds to an excessive degree. An illustration will show how extreme a result might follow. Suppose a given corporation were earning 18 per cent on its total investment. If it were able to borrow at 6 per cent, it could borrow all the funds needed to operate the business and still show interest earned the required three times over.

Current Assets	$ 50	Current Debt	$ 0
Fixed Assets	50	Bonds	100
	$100		$100

Total investment $100 X 18% return = $18

Interest charges 6% X $100 = $ 6

In view of the limited return, the lender of funds should not be expected to provide the whole investment required. Whenever earnings yield so high a rate of return on investment, the inducement to new investment to enter the field is great and the return is likely to fall.

Even so high a coverage as three times interest earned in good times will not always insure coverage of interest in depression years, as indicated by the record of earnings of some of the leading groups

of industrials, whose earnings not only fell more than two thirds but sometimes showed deficits, as will be seen from Table 10. In order to make for easier reading, the combined earnings before interest has been deducted are converted into index numbers, with the amount for 1929 made equal to 100. The indexes for the years 1930 to 1935 may be read as percentages of 1929. If it were assumed that the interest was earned three times over in 1929, when earnings were equal to 100, those fields in which the index did not fall below 33 would show charges fully covered in every year.

TABLE 10

RELATIVE FLUCTUATION OF EARNINGS OF MAJOR COMPANIES IN VARIOUS FIELDS OF BUSINESS: 1929-1935

	1929	*1930*	*1931*	*1932*	*1933*	*1934.*	*1935*
Automobiles	100	48	24	—12	23	24	57
Chain stores	100	92	98	55	79	85	85
Chemicals (industrial) .	100	76	60	32	48	58	74
Iron and steel	100	23	6	—30	—12	1	14
Machinery	100	67	5	—23	0	24	45
Mail order	100	29	3	—21	38	59	82
Meat packing	100	84	—7	19	75	83	92
Metals (nonferrous)	100	20	—2	—20	0	10	23
Petroleum	100	52	—1	18	21	32	45
Rubber	100	—16	1	0	36	44	62
Sugar	100	54	32	53	77	79	70
Theater and motion picture	100	79	39	3	14	38	44
Tobacco	100	121	127	119	68	81	82

Source: Standard Statistics Company, *Standard Trade and Securities,* Sec. J, August 14, 1936, pp. 6-31.

The year 1929, used as a base in the table, was not an ordinary year, but it was unusually profitable for some lines, notably the iron and steel industry. For that reason, it would have been unwise to use the earnings for that year as a standard in deciding how large a debt might reasonably be incurred. Since business as a whole did not go into debt in that year in any large way, the precipitate decline in income reflected in the indexes was not fatal to the solvency of more than a few major industrial corporations.

Another caution is necessary in reading the reported earnings figures and the number of times interest has been earned. The net income is after the subtraction of such items as loss through the write-down of inventory to a market value lower than cost, and depreciation and depletion of the fixed assets. Such expenses or losses, while important, do not necessarily produce any immediate drain upon cash. Consequently, if the net balance before such items are deducted is adequate to cover interest, the business may be able to carry on operations as well as before without impairing its ability to serve its customers.

The peculiar noncash character of the depreciation allowance, unlike most expenses, has even led to the suggestion that the "times interest earned" measure be computed on the basis of the net income before the deduction of that item. In particular years during which the company is temporarily hard pressed, such a computation does have analytical value. The figure is misleading, however, if it is used over a long period, because eventually the depreciated property has to be replaced, and so over the long run there tends to be a drain on cash equal to the sum of the depreciation allowances.

An additional factor that must be kept in mind is the one previously mentioned-namely, that in years when earnings are inadequate the deficiency may be cared for from existing working capital. This working capital factor and the fact that the net earnings are not synonymous with the net change in cash explain why any number of prominent corporations were able to avoid the threat to solvency of depression deficits. Some prominent examples of this situation are shown in Table 11. This illustrative material shows

TABLE 11

TIMES INTEREST EARNED FOR SOME LEADING INDUSTRIALS: 1929-1935

	1929	*1930*	*1931*	*1932*	*1933*	*1934*	*1935*
Allis-Chalmers Mfg. Co.	6.3	5.4	2.5	2.8	2.8	0.4d	3.6
California Packing Corp		1.2	5.1d	5.2d	6.8	6.1	6.9
Chrysler Corp.....	7.2	1.1	1.7	3.0d	4.0	4.4	15.5
Philadelphia & Reading Coal & Iron Corp.....	0.6	1.4	1.5	.6d	.4d	0.7	0.9
Remington-Rand, Inc.	3.1	5.7	2.2	1.6d	1.4d	2.2	2.7
Texas Corporation	18.1	3.2	0.5d	0.6	1.0	2.1	4.2
Warner Bros. Pictures, Inc.. .. •	6.6	2.3	0.2d	1.3d	0.1d	0.5	1.1

d — deficit divided by interest charges.
Source: Standard Statistics Company, *Annual Report and Statistical Section,* Individual Companies, 1939.

why a rule limiting bonds to working capital is a useful supplement to the "earnings to interest" restriction in preserving the corporation from financial disaster, provided that the strain of untoward events is not too severe or too prolonged.

Industrial bond practice. In an effort to gain an idea of the more common characteristics of industrial bond issues, a random sample of 200 issues such as are listed in the more complete investment manuals was studied. The large proportion of relatively small issues may be seen from Table 12.

The most common type of bond issue was the ordinary first mortgage variety (49 per cent). Debentures were frequently used, constituting about one fourth (26 per cent) of the total studied. This proportion is much higher than among the railroads and public utilities. Approximately one sixth (18 per cent) of the total were notes, which resemble bonds except that their maturity is shorter-

frequently in the neighborhood of five years—and are more generally without any mortgage security (only five of the 35 note issues were secured). The bond issues were generally of medium maturity, running for the most part from ten to twenty-five years. Probably the shorter maturity makes the use of a lien seem less necessary for notes, and, in cases where they were used to supplement a longer-term mortgage bond, they could be given only a junior lien if one were to be provided. Only a small part of the total funded debt issues (7 per cent) fell in that miscellaneous class which includes second and general mortgages, income bonds, guaranteed, and leasehold issues. The conversion feature was found in about one tenth of the issues. Very few serial maturities were to be found, but the sinking fund was used in more than half of the issues, which, when read with the considerable number of note issues, indicates the common tendency to provide for debt retirement in the industrial field. As might be expected from this characteristic,

TABLE 12

SIZE OF ISSUE OF SELECTED INDUSTRIAL BONDS

	Per Cent
Less than $1,000,000	38
Under $ 5,000,000 but not less than $ 1,000,000	40
Under $10,000,000 but not less than $ 5,000,000	9
Under $50,000,000 but not less than $10,000,000	9
$50,000,000 and over	4
Total number of issues	100

almost all of the issues were callable, a considerable number—about one fourth—at par, and the remainder at premiums that ranged for the most part between 2 and 5 per cent. Very often these premiums grow smaller as the bond approaches maturity.

Use of Preferred Stock

Limitations on the use of preferred stock. As difficult as it is to discover rules for establishing maximum debt limits that may be said to be "widely accepted," it is still more difficult to find any such precepts for the use of preferred stock. Bonds are more generally sold to the institutional buyer, who is genera1 1 Llyldw to clebt_instruments. 15af ' of an FSSiie Ts to go to this market, the common standards must be met. Any investment banker merchandising an issue will insist that the corporation meet the desires of his customers. Preferred stocks are not generally permissible for the regulated institutional investor.[11] Individuals are the usual

[11] In 1928 New York amended its law to permit life insurance companies to invest in preferred stocks. For eligibility requirements of preferred stock under the New York law, see W. E. Baldwin, editor, *New York Insurance Law* (New York : Banks Baldwin Publishing Co., 1935), p. 102.

buyers, and theyirarygreatly in their attitudes. With the incentive of higher yield, they may accept risks of almost any sort. When the buyers are unskillful, they may be quite unaware of the extent of the risk. Preferred stocks may also be used to arrange priorities to income and voting control among a group that is interested in a small corporation in any way to suit their wishes. Because, then, of the unstandardized market—or the variety of markets—in which preferred stock is sold, and the uses other than financing to which it may be put, such as enabling close corporations and promoters of mergers to cut their corporate pies in various ways, no rules can be said to have "general acceptance."

The management should have as its objective, however, the maintenance of a capital structure that will reflect financial strength. If it hopes to give its preferred stock the highest standing, issuance should be so limited that, when combined with funded debt, the sum of the two will not exceed the limits already suggested for bonds. However, failure to pay the stipulated preferred dividend does not cause insolvency, and so it would not be imprudent to issue a larger amount of preferred stock than of bonds in any given situation. But, in assuming the contingent charge of preferred dividends, the management should be conscious of the potential disadvantage which would follow in the event of nonpayment through the accumulation of a claim which would gradually render the common stock more and more speculative and unsuitable for normal financing. When stock is sold to thepublic, there is also the obligation of good faith to thoge Vvliichave invested in a security that has given s rtp-t-l-re tioNqf apossible hi _h return for a limited and more certain income. in policy would dictate the assumptionof even con- r taigerit Charges only for such an amount as can be paid regularly except under unexpected conditions or extreme adversity, such as a very severe business depression or an unlikely but possible change in competitive conditions.

The limits which this general policy would require would vary with the type of industry and the company, but it would probably be agreed that some approximate rules might follow the lines of those suggested for bond issues. Suggested maximum limits are as follows:

1. *With respect to assets.* Indstrial—preferred stocks should not exceed the net amount obtained after all debt has been deducted frOnTthe simfOfthe Aingible assets. In valuing the assets for this purpose, care should be exercised that the assets are not valued at more than their current replacement value with suitable allowances for loss due to depreciation, obsolescence, and depletion. That such a rule is not ultraconservative may be judged from the fact that it would permit a capital structure in which all of the tangible

assets were balanced by debt and preferred stock, with no asset support for the common stock save goodwill and other similar intangibles. Such a large use of preferred stock could be justified only where earnings indicated a substantial goodwill." This qualification suggests a limitation with respect to earnings.

2. *With respect to earnings.* Preferred stock should be limited so that the sum of the interest and pre erred dividend charges are earned-on-an average of at least twice Over in a representative period possible, a study should be made of depression years to give assurance that a representative average including unfavorable as well as favorable conditions would show a margin over the contingent charges."

Many, perhaps most, industrial corporations look forward to growth and expansion as their normal lot. If such a company can point to rising earnings and an expanding net worth, the officers are not likely to regard an average of past earnings as indicative of future performance. They will emphasize the trend. The earnings of the last year, rather than the average of the past three or five years, may be a better measure of the probable earning power of the near-term future. If the circumstances seem to warrant that view, and the trend does not appear to be the result of temporarily favorable conditions, the most recent year's earnings may become the basis for measuring the margin of safety for the proposed preferred stock.

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[12] That capital structure proportions and balance sheet values of stock may mean little or nothing is shown by the statement of the Thatcher Manufacturing Company. On December 31, 1938, its capital structure read as follows:

Preferred stock (132,000 no-par shares)	$1,320,000
Common stock (no par)	1,596;173
Capital surplus	82,918
Earned surplus	1,263,338
	$4,262,429

The preferred stock is carried at $10 a share. It pays a cumulative dividend of $3.60 per annum, and 16,459 shares had been reacquired for the treasury at about $43 per share. If the amount outstanding, 115,541 shares, were valued at $50 a share (its preference in liquidation), it would total $5,700,000, or more than the total assets.

In such cases, analysts are likely to relate assets to the amount of preference in liquidation rather than to the nominal balance sheet value. The common is supported by goodwill, not appearing in the balance sheet, rather than tangible assets.

"If the test of average coverage is applied so as to cover such a major depression as occurred during the early 1930's, a substantial number of industrials would be unable to show the conventional twice earned. A study of 232 major industrial corporations showed 101 with preferred stock outstanding as of December 31, 1935. Of this latter number 61 companies had preferred outstanding for the whole decade 1926-1935, which was about half prosperity and half depression. Of the 61 corporations, 42 earned their preferred dividends on the average better than twice over, and 19, or almost one third, failed to achieve that standard.

Preferred stock with special features. Whenever a corporation cannot meet the two standards suggested here for preferred stock financing, it is doubtful as to whether such an issue can be justified —at least for distribution to the public. An exception is nPcessary where-th_e_atnalc--is rot a --straight -preferred but is in the class of ()rids. These mixed issues may take the form of preferred with a par icipaifiik feature, with the privilege of conversion into cornm(rTEOcii, or with common stock_purclase-w-arrants, or of preferred sold in a block with comMorishares, in which the "common is treated as a bonus or sold at a nominal price. Such potential participation in future profits is added to the stipulated return to compensate for investment risk. • The new corporation or one unable to meet the standards suggested would be the most likely users of these devices, although sometimes a corporation that could finance without their use employs them to obtain more favorable terms during a period when common stocks are popular.

Both the participating and the warrant features are used infrequently to add attraction to the preferred stock of industrial corporations. The conversion privilege is the common device among large established industrials. Between sixty and seventy examples may be found on the New York Stock Exchange. The sale of pre ferred and common in a block is usually employed by a new company in the promotional stage. Through it the public is given a prior claim for its cash investment with the preferred stock plus some common for risk compensation, the promoters taking common for services, patents, mining rights, and whatever cash investment they may make.

Because the conversion privilege and the stock purchase warrant are found much more frequently in industrial finance than among the regulated public services, the More important problems connected with their use will be considered here. The chief reasons for this more common usage by industrial corporations are (1) the greater desire to eliminate prior securities and attain the simplicity of an all common stock capital structure, and (2) the greater opportunities for increased earnings in unregulated industry which make a privilege to share in those potential profits valuable. With only common stock, a corporation will enjoy the highest financial rating; it can husband its resources if earnings shrink; and it is in a strong position to issue prior securities to meet emergencies or to acquire profitable properties in difficult times.

The problem in giving these privileges to preferred stockholders is to place the price at which the privilege is to be exercised low enough to make it attractive, and yet not so low that it will unduly dilute the per-share value of the common stock and so injure the position of holders of the latter.

As for the first precaution, it is difficult to say how close the price at which convertible bonds may be converted (or stock purchase warrants may be exercised) need be to the going market price of the common stock to make the privilege as attractive as necessary. The conventional practice is to place the conversion price or the warrant purchase price somewhat above the market price of the common stock at the time the new security is being sold. The factors which make possible a wide margin between the price at which the privilege may be exercised in the future and the going market price are (a) optimism over the stock market outlook, (b) a market record for the common showing it to have been substantially higher in the past, and (c) a rising trend of earnings and growth of property.

The theory of such an issue is relatively simple. The purchaser is paying for two things: the stock and the privilege. If a corporation can sell a 4 per cent preferred stock at par with a privilege to convert into common at 40 (that is, $40 par value of preferred for each share of common), while the same preferred stock, would sell at only 80—that is, on a 5 per cent yield basis—without any such privilege, the investor is paying the difference between par and 80 for the privilege. For an investment of $1,000, this arrangement might be analyzed as follows:

Cost of 10 shares of 4 per cent convertible preferred at $100 ...	$1,000
Value of stock without conversion privilege	800
Cost of conversion privilege	$ 200

At $40 per share for the common stock, $1,000 of par value of preferred could be converted into 25 shares of common If at the time the preferred was offered for sale the common was selling at $35 per share, 25 shares would be worth $875, and it might be argued that the conversion privilege was without value. Certainly no one would expect to purchase $1,000 worth of preferred stock to convert it into $875 worth of common But, if the common rises over $40, the 25 shares will be worth more than the $1,000 paid for the preferred, and some payment for the privilege will have been justified. If the common were to rise to 50, the preferred could be converted into 25 shares of common worth $1,250, and a profit of $250 would have been made from the privilege, which cost $200.[14] The same profit could have been made directly in the common stock only by investing $1,000 in the 25 shares at 40." The attraction of a conversion

" The total profit is attributed to the conversion privilege, although a straight preferred might have offered some poSsible appreciation during the interval. In that case a part of the profit might be attributed to the preferred investment instead of solely to the privilege. Practically, this point may be ignored, for dividend-paying preferreds are not generally purchased for appreciation profits.

" The common stock might, however, have paid some dividend return to offset the disadvantage of larger investment while waiting for the appreciation

privilege or a stock purchase warrant lies in the hope of a profit that is a substantial return in relation to its cost.

Whether or not the investor pays excessively on the average for such speculative privileges, when the cost is arrived at by deducting the value of the investment contract, it is difficult to say. The investing public may not weigh the possibilities with such care as this analysis suggests. There is a strong tendency to treat the whole cost as an investment with a slightly subnormal return and the privilege as something thrown in as a bonus that, like a lottery ticket, may pay a handsome prize. When the investor is limited by personal investment policy or by legal restrictions to bonds, or bonds and preferred stocks, the appeal of the privileged fixed income security may be great. In fact, such an issue will reach this market when an ordinary common stock issue could not be sold to it. If overvaluation of the privilege does exist, the management has available a means of cheapening the cost of funds, which will at the same time point the capital structure in the direction of simplification. Conversion will eliminate the prior securities. The exercise of common stock purchase warrants will increase the common equity and so diminish the relative importance of the prior securities. If the money derived from the sale of this common stock is not needed for expansion of assets at the time the warrants are exercised, it can ordinarily be used to redeem some of the bonds or preferred stock, both as a rule being callable in the case of industrial corporations."

But the market may not attach what seems a reasonable value to these privileges, and management must keep in mind the second cau-

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to be realized; the return upon the "cost" of the privilege is nil except for the appreciation profit, and the loss might be complete if the privilege expired before a profit was realized.

" The call feature may be used to cut short the life of a privilege before it has had time to become valuable enough to exercise. If a few years after the financing the corporation had surplus cash from earnings or had improved credit so that it could refund more cheaply, it might call in a convertible issue or one with warrants before it was worth while to convert or exercise the warrants. Profits from appreciation would be limited to the excess of call price over cost. This limitation of profit would not exist in a noncallable issue or one which had detachable stock purchase warrants that could be separated and retained in the event of redemption.

The call feature might be employed, on the other hand, to force the exercise of the privilege. Let us suppose that, in the case of the issue mentioned above in the text, the common stock had risen to 50, so that the purchaser of ten shares of preferred had stock worth $1,250, or a profit of $250, but that no conversions were being made because the preferred still paid more dividends than the common. The corporation might force conversion if the preferred were redeemable at 110 by issuing a call notice. Holders would be obliged to convert or see the value of their stock shrink from $125 per share to $110. They would be obliged either to realize their profit by sale or to convert into the common in order to avoid the loss of value. Similarly, the owner of a stock with the customary nondetachable warrants would have to sell his holdings or use his warrants for the purchase of common stock before the redemption of his security.

tion sounded above—namely, to avoid so generous a bargain that the value of the common stock will be injured at some future time. If a corporation gives the privilege of acquiring the common stock at $40 per share and then the stock appreciates to $80, the old shareholders will have given an interest in the business at a price that will tend to pull down the average value per share. The principle may be illustrated by using the conversion privilege mentioned above. If the outstanding preferred totaled 10,000 shares with a par of $100 per share, and the common totaled 40,000 shares with a par of $25 and book value of $80, the capital structure before conversion would read as follows:

Preferred stock (par $100)	$1,000,000
Common stock (par $25)	1,000,000
Surplus	2,200,000
Total	$4,200,000

Book value of common per share = $3,200,000 40,000 shares = $80.

After retirement of the preferred stock by conversion_at 40 4 the common stock wonicl. be_inereased by 25,000__ shares, or $625,0007 (25,000 shares X $25 par value), and the surplus would be increased by the amount of the balance, or $375,000. The capital structure will be as follows:

Preferred stock	None
Common stock (par $25)	$1,625,000
Surplus	2,575,000
Total	$4,200,000

Book value of common per share = $4,200,000 ± 65,000 shares = $64.62.

The conversion has brought about a "dilution" of the value of the common stock from $80 to $64.62. The illustration has the weakness of employing balance sheet figures, with which investment value, customarily measured by market price, may not agree. From this point of view assets may be overvalued or undervalued in the balance sheet. The factor of earning power is ignored, although value and earning power are related. Dilution of earning power per share can be readily illustrated from the same situation. If earning power had risen to $8 per share (or 10 per cent on $80), the income account would have shown the following:

Net profits:	
Preferred dividends ($4 X 10,000 shares)	$ 40,000
Balance for common stock ($8 X 40,000 shares)	320,000
Total	$360,000

After conversion the net profits divided by the total of 65,000

shares of common stock outstanding would amount to but $5.54 per share ($360,000 ± 65,000). Such figures explain why it is essential to study carefully the possi cTs privileges upon the future Tif the AnCY Possible convergion means the possible re- rncra-1-erf-t-ratling on Once the prior charge has been eliminated, the Conunon StOek should be that much the more stable in earning power and market value.[17]

...Since the ecilTrfnarr-stockholders may make sacrifices to build up , the per. adLeizal.tte-of--the-emmon stock by leaving earnings in the .- business, it is not unusual for the iiiirttegr co6e $0 irraiigeelthat the conversion price of the common will be raised by gradual steps over a period of years.[18] __(1u_theother hand, the corporation will need toluntectthe recipient ofthe iiiiViVnagain-st mets of the corporation that might dilute its value, as the increase in thnoutstand, cgmmon shares witnokuL au nzicrpp ii the property behind the shares oe-k--clividendsr_e_r_by-the_sile_o_f common stock at a prine less than that set in the privilege.[19] The life of theieprivileges— 'sfi'ULfld 7551 bellirtitted, so that corporationsmay be freed from their influence aftet-a-suitable period. Since it is doubtful that much value is attached by buyers to'a right more thantenyeats dis7 tant that period would seem a suitable maximum life,—

Common Stock

The material presented earlier in this chapter showed the paramount place which common stock occupies in the financing of major industrials.[20] This predominance has been facilitated by the broad-

" For a further discussion of the conversion feature with graphic illustrations, see H. G. Guthmann, "Measuring the Dilution Effect of Convertible Securities," *Journal of Business of the University of Chicago,* January, 1938, pp. 44-50.

" Thus Goodyear Tire & Rubber Company $5 convertible preferred was convertible into common any time on or before October 1, 1938, at $331 per share of common, the preferred being taken at a value of $100 per share; thereafter the conversion price rises by gradual steps to $75 per share of common on and after October 1, 1944, to October 1, 1946.

" The cumulative convertible first preferred stock of the Radio Corporation of America is protected from dilution by the following requirement: "The number of common shares issuable for each share of first preferred, however, will be increased or decreased in the same proportion as the number of common shares outstanding may be increased or decreased, respectively, as a result of any split-up or combination of the common shares by reclassification or otherwise or as a result of any dividend paid in common stock." Moody's *Manual of Investments,* Industrials, 1937, p. 2190.

The Neisner Brothers, Inc., 41 per cent convertible serial preferred stock (1937) goes further and protects against dilution due to (a) rights or stock options, (b) additional convertible issues, (c) stock dividends, and (d) stock split-ups.

[20] Actually the figures showed the importance of common stock *plus* retained earnings, but the latter are a form of investment by common stockholders. Because of stock dividends, which convert surplus into common stock on the balance sheet, and the creation of paid-in surplus, which is not always distin-

ened investment interest in industrial common equities since the first World War. Occasions still arise where the economy of bonds and preferred stocks make their use attractive, particularly when large property acquisitions or mergers are being financed. At times, stock market conditions are so adverse as to make fixed income securities a desirable recourse to avoid selling shares at too greatly reduced prices—the dilution evil. Smaller corporations also find it characteristically easier to use prior securities than common stock. But there is a constant tendency for bonds and preferred stocks to be retired by sinking funds, conversions, and refinancing into common stock. The problem of how to use common stock is important to all corporations and is discussed in its various phases in later chapters, particularly Chapter 16, which deals with the sale to stockholders, the customary method. General also is the problem of expanding the common stock equity by the retention of earnings discussed in Chapter 23. The higher return earned by the successful industrial corporation explains why the latter method is so frequently employed for expansion in this field.

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guished from surplus arising from earnings, it is impossible to distinguish between the two sources save by historical analysis of the individual corporation.

CHAPTER 12

PUBLIC UTILITY FINANCE

INDUSTRIAL finance is a direct problem for a large number of 1 businessmen. The public utility industries, on the other hand, are concentrated in a limited number of corporations, which are usually monopolies, so that the number who are responsible for their financing is small. Businessmen have a large indirect interest, however. As investors, they often own utility securities and find it desirable to understand the conditions governing their issuance. At a time when the Government is taking an increasing interest in all financing, the practices which have grown up in the public utility field, where supervision has existed for some years, are decidedly worth understanding. In some instances, precedents may be carried over which are not wholly suitable in the competitive industrial field. Only by appreciating the background of both fields can the businessman deal adequately with such problems. Furthermore, sound utility financing is intimately related to reasonable rates and adequate service. The latter are important not only as they effect his business costs but more broadly as they influence local property values and make the community attractive to labor and to possible new industries.

Public Utility Capital Structures

The utilities group. The term *public utility* is commonly used in financial circles to include corporations selling electricity, gas, telephone service, local transportation, and water. In spite of unlike operating problems, the financing is much more uniform than among the heterogeneous industrials. The bulk of our attention will be centered upon the practices of the operating electric light and power companies, which have been of chief importance in recent years.[1] Since the beginning of the 1920's the electric utilities have grown most rapidly, have provided a large part of the new bond offerings for the major investment bankers, and have pushed the total of utility bonds ahead of railroad debt as investments in many high-grade institutional portfolios. Their financing also has especial interest for the student because in their rapid growth they have

[1] Pure holding companies in this field are discussed in Chapter 25, where the utility type constitutes the most important class and illustrates the most complex arrangements.

felt the need for using all of the means possible to raise the required funds, and this has led to expansion of debt and sometimes of preferred stock to the maximum permitted by the standards of the market. Thus the capital structures of this industry serve to illustrate the conventional limitations which apply to the whole utility group.

Types of securities used. The figures given in Table 13, representing the combined balance sheets of ten major electric light and power companies, which in some cities own and operate the gas business, may be regarded as fairly typical.

TABLE 13

COMBINED CONDENSED BALANCE SHEETS OF TEN MAJOR ELECTRIC AND GAS OPERATING COMPANIES: 1935
(dollars in millions)

Assets			*Liabilities*		
Fixed Property (net). .	$3,250	85%	Funded Debt	$1,627	42%
Investments	161	4	Other Fixed Liabilities...	48	1
Intangible Assets	129	3	Preferred Stock	447	12
Other Fixed Assets	31	1	Common Stock & Surplus	1,514	39
Cash and Equivalent.. ...	152	4	Capital Reserves	64	2
Receivables	76	2	Current Liabilities	142	4
Materials and Supplies. .	43	1			
	$3,842	100%		$3,842	100%

Source: Standard Statistics Co., *Standard Trade & Securities,* Sec. J, August, 1936.

The assets are predominantly fixed in form being chiefly plant assets devoted-- to the -generation and distributio_n he current items are distinctly secondary in imp Ortan a j. TEat the capital structure proportions are, fairly typical of the industry may be seen by comparison of the figures of these ten major companies with the 1932 figures prepared by the Federal census for all commercial electric companies in the United States. These figures are given in Table 14.

TABLE 14

ELECTRIC UTILITY CAPITAL STRUCTURES
(dollars in millions)

	Ten Large Companies		*All Companies*	
Long-term debt	$1,627	44%	$ 6,889	46%
Preferred stock.	447	12	} 6,936	47
Common stock } ..... Surplus	1,514	42	1,134	7
Capital reserves	64	2		
	$3,652	100%	$14,959	100%

Source (all companies data): Department of Commerce, *Census of Electric Industries: 1932,* Central Electric Light and Power Stations, p. 23.

Another study, which gave equal weight to the small and the large companies, showed a slightly lower proportion of funded debt.[2] The data were for all electric light and power companies listed in Moody's *Manual of Public Utilities* as having 2 million dollars or more of assets. Figures for the years 1920, 1923, 1925, and 1926 were studied for 92 fuel-electric and 68 hydroelectric companies. The most common percentages (modes) for the major balance sheet items were as shown in Table 15.

TABLE 15

COMMON PROPORTIONS IN ELECTRIC LIGHT AND POWER COMPANY BALANCE SHEETS
(modal percentages)

Assets	*Fuel-Electric*	*Hydro-electric*	*Liabilities & Net Worth*	*Fuel-Electric*	*Hydro-electric*
Fixed assets	88	92	Long-term debt	36	41
Current assets	7	4	Current liabilities	5	2
Other assets	3	2	Nonvoting stock*	11	14
			Voting stock**	25	30
			Surplus and reserves	14	6

* Usually preferred stock.
** Usually common stock.

By using the mode, the most common balance sheet proportion is shown, whereas the more frequently used percentage, based upon combined dollar figures for all companies, gives a typical figure that often represents the practice of the very large companies dominating the totals. The modal percentages do not add to 100 per cent but, if they are regarded as indicating the proportions which would exist in the typical capital structure, the following figures are obtained:

	Fuel-Electric	*Hydroelectric*
Long-term debt	42%	45%
Nonvoting stock	13	15
Voting stock	29	33
Surplus and reserves	16	7
Total	100%	100%

Use of Bonds

Conventional debt limits. The consistently heavy proportion of bonds in these capital structures is in close connection with their interest: tent and lesser use by industrials. But, Unlike the latter, the utilities have enjoyed a fairly constant demand for their output, freedom

[2] "The Financial Plan of Electric Light and Power Companies," *Bureau of Business Research, Bulletin No. 35* (Urbana: University of Illinois, 1931). The original tables show the dispersion of these various percentages as well as the modes.

from the hazards of competition, and relatively stable earnings. Such a situation has supported the view that-de t mig t e properly made a permanent part of the capital structure. The cheapness with which funds can be obtained from conservative investors, for utility bonds are legal for many fiduciary investors, has been notable and would have favored the use of funded debt even if continuous and rapid growth had not provided the strongest sort of motivation for tapping every possible source of cash.

How much funded debt may be regarded as proper for a utility? ably 60 par-aei of the structure would be considered an approximately suitable maximum Since the current habititin are ordinarily negligible,:the capital structure items constitute the bulk of the liability items in the baraffee sheet:[4] ThefefOre, the Rae might furideddat shcrurd not exceed 60 per cent of the assets, of which a very minor part will be current and the major part will be fixed. Some operating utilities may occasionally own investments; these will customarily consist of stocks in subsidiary or affiliated companies. An electric utility might hold stock in a generating subsidiary, a street railway, an ice company or a steam company.[5] A gas utility might own an interest in a natural gas producing or pipe-line company. But stocks in other utilities, which are in turn subject to bonded debt, are not as suitable as operating assets for a foundation for bonds. If the subsidiaries are substantially in debt, bonds of the parent operating companyilMitla ffe restricted fo a suitable percentage of the operating assets,,-or-else the bonds will tend to fall into the holding company classification and be subject to similar risks and higher borrowing rates.°

Because of the customary absence of any free liquid assets the utility is much more dependent upon current earnings o meet interest and other charges than the average large industriat ion. The utility is peculiarly dependent upon earnings because, even if the demands for continued public service were not present to prevent liquidation, it is doubtful that the properties of a failed utility would

The growth of Government competition might materially alter the strong financial position of the electric utilities. In the areas where major Federal power projects are found, the credit standing of private utilities has been measurably affected, though in varying degrees, and some have been at a serious disadvantage in their financing.

The Edison Electric Illuminating Company (now the Boston Edison Company) for a number of years followed the unusual practice of avoiding long-term debt and used coupon notes ranging up to three years' maturity. These bore a low coupon rate. In 1935, however, the company funded $55,000,000 of notes due in 1937 by selling an issue of 30-year 3t per cent first mortgage bonds.

' Commonwealth Edison owns stock in the Super-Power Company of Illinois, a generating subsidiary, and in the Chicago Rapid Transit Company, which operates the local elevated lines. Consolidated Edison of New York City controls the New York Steam Company.

See pp. 610 and 628.

have any but the most negligible value if a break-up of the business were attempted. For this reason interest charges should be limited so as to show a margin of safety—not less than two times earned in ordinary years is regarded as a reasonable standard—and the record of the company and the industry should indicate that earnings will cover the fixed charges in the most adverse years.

Because of the prime significance of earnings, it might appear that any limitation of debt with respect to assets might be omitted. However, if the corporation were permitted to consider earnings as the sole basis for assuming fixed charges, it might in a period of low bond yields issue debt for an excessive part of the capital structure and be embarrassed at a later time, when the problem of refinancing at more normal rates returned. If a corporation could borrow at 3 per cent, it could show "two times earned" for interest charges on a funded debt equal to the total property if that property was earning but 6 per cent." Such a heavy debt would not be justified, however. If at maturity the 3 per cent bonds had to be refunded into 5 or 6 per cent obligations, the margin of safety would fall to a negligible figure or disappear. Emphasis should be laid upon the property which produces the earnings, because the general objective of commission regulation is to keep earnings in a fair relation to the value of the property employed in rendering the service. Commission regulation is unlikely to permit earnings that will over a long period represent as much as two times the interest charges if indebtedness exceeds 60 per cent of the property valuation upon which a fair return is allowed.

The original objectivuof commission regulation was to protect the publit-a-guiust exffEitint rafes, which the public service corporation dnlZIM1ſ6TVIT5echarge because of its monopo y pagilia Without croii Viipon all the a mgproblems Involved, it is probably fair to say that the standard of proper rates most commonly accepted was that they should be such as to allow the utility to recover the "costs" necessarily incurred in rendering the service. The idea of

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Protection for the bondholders against this hazard is provided by a special limitation in the indenture of the Milwaukee Electric Railway and Light refunding and first gold 5's of 1961. After providing that bonds shall not be issued for more than 80 per cent of property additions or beyond the point that earnings are twice the interest charges, it requires that bonds shall not be issued beyond the point where they can show 12 per cent earned on total par outstanding. since commission regulation would rarely permit earnings to exceed 8 per cent on total property investment, the rule, in effect, limits bonds to two thirds of the capital structure. (Eight per cent on total investment would equal 12 per cent on two thirds of the total.) If regulation kept earnings down to the conventional 7 per cent of property investment, the rule would limit bonded debt to 58 per cent of the total. Note that, as long as the corporation could earn 12 per cent on its total debt, high cost refinancing would not push interest charges over one half of the earnings until the average interest cost exceeded 6 per cent on the total debt.

"fair return on fair value" implies a percentage upon the asset investment just sufficient to induce investors to supply the funds required.

Two main bases of valuation for rate-making purposes have been recognized—original cost and reproduction cost. As long as commissions and courts entirely refuse to give weight to the cost of replacing the operating assets used, an element of uncertainty will be present. The valuation of the utility's property on this basis will tend to fluctuate with the movement of the general price level, and the asset support for debt will have a shifting quality. From the financing point of view, the cost basis of valuation would have the decided advantage of providing a recognized figure to which debt and preferred stock issues could be anchored. Original cost less allowances for depreciation is the customary balance sheet account in accounting records and is kept under the rules of a regulatory commission. Consequently the application of any rule limiting debt to some percentage of assets would be relatively simple and easy to apply, rather than the difficult problems of arriving at a hypothetical estimated replacement value or some combination of cost.

The question of valuation of utility property for rate-making purposes is of interest here only as it affects the financing problem. The management must still regard the matter of proper valuation method as a debatable one. Since the normal purpose of issuing utility bonds is to aid in the acquisition of new property, it is natural to think in terms of cost.[8] However, if weight is given to replacement value, the management will find it necessary to cast a backward look and make new estimates upon the occasion of each new financing to make certain that it is keeping the funded debt within safe limits.[9]

Form of bonds used. The bonds invariably employed in the typical electric utility's capital structure consist for the most part of a single, long-maturity, open-end, first mortgage issue secured by the whole properties and rights acquired[10] by the

[8] Occasionally bonds may be used to acquire existing property, in which case "cost" to the buyer corporation would not necessarily be the original cost of constructing the property.

[9] For the effect of a fluctuating valuation due to a replacement or reproduction cost basis upon the financial stability of a utility, especially upon the common stock, which suffers from declines and profits from increases, see John Bauer and N. Gold, *Public Utility Valuation for Purposes of Rate Control* (New York: The Macmillan Co., 1934), pp. 388-394.

[10] A study of early capital structures shows a different usage. The New York Edison Company funded debt (1932) includes nearly $38,000,000 of underlying noncallable bonds issued years ago under mortgages created between 1895 and 1899. One of these issues does not mature till 1995. Another example is the closed, noncallable $10,000,000 Pacific Light and Power Company (a predecessor of the Southern California Edison Company) first mortgage 5's of 1942, which were sold in 1902. In the first open-end issues, a maximum authorized total, which seemed generous enough to cover future needs, was set.

complex multiplicity of liens so characteristic of the older railroad corporations has been successfully avoided. Some minor "diyis sional" lien consistin_gof the assumed bonisoria,9uired property, which was cly_thesubiecroLa.boririssue, will be found occa- Kona y. Although it is simpler to let such "c1615Fili:Co maturity re refinancing, there has been a strong tendency to refund even these bonds. so that the n.Irrrdetrairbt ttegertbITIrs cirav-Virt' first mortgage, with Out that qualifying "subject to the following minor fiens."[11] A strong tendency toward simplification has been evident that has been powerfully assisted by (a) the frequently superior credit of the larger assuming corporation, (b) the common use of callable bonds, which permit refunding, and (c) the higher rating accorded bonds which are not subject to prior liens.[12] The absorption of other electric utilities and the consequent assumption of debt usually represents the merging of adjacent properties more efficiently operated together and drawing their power from a common generating pool. The remarkable reduction in power costs of recent years has been made possible in part by the growth of power networks bringing together large service areas that could use giant generators and interchange surplus power. In some situations, however, operating efficiency may be greater or political factors may be handled more satisfactorily by the maintenance of completely separate corporate organizations, and the interchange of power may be arranged under a contract.

The protective provisions that are designed to prevent an excessive issuance of bonds under the open-end feature of the utility mortgage very commonly provide that bonds shall not be issuedigr_ `more than 75ffralirorarif fiiroTiertry Witiked:"" Thig sTindard

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Unexpected growth made these totals inadequate and led to the present unlimited open-end feature.

[11] As an example of the lengths to which the corporation may go, the Commonwealth Edison Company in 1931 deposited the full principal and unearned interest for the 12 intervening years with the trustee for the relatively small $780,000 issue of assumed Commonwealth Electric Company first 5's due in 1943. This cash deposit discharged this minor noncallable assumed bond issue. Thereafter the great open-end issue of Commonwealth Edison, which had been "first collateral," a combination of first and junior lien, was exchanged for straight first mortgage bonds.

"An interesting case of debt simplification can be traced in the refunding program of the Pacific Gas and Electric Company, which in 1930, had, in addition to its first and refunding mortgage bonds, no less than 36 issues of itself and subsidiaries. By January 1, 1937, these had been reduced to six and in 1939 to one huge issue and a single noncallable issue of the subsidiary San Joaquin Light and Power Corporation (Series B, unifying and refunding mortgage 6's of 1952).

[13] The indenture of the Public Service Company of Colorado first and refunding bonds provides for the issuance of additional bonds (a) to the extent of 75 per cent of expenditures made for additions and extensions and the cost or fair value (whichever is less) of purchased property; (b) for 75 per cent of the expenditures made for stock of a subsidiary company and for

is weaker than the 60 per cent maximum suggested above, and should be regarded as permission to meet future conditions of a possibly difficult nature rather than as a generally acceptable standard. A corporation which has kept well below the 60 per cent limit could acquire some property, paying for as much as 75 per cent of it in bonds, without necessarily going over the lower limit on its total debt to total property ratio. In fact, a corporation with a capital structure of which only 50 per cent was in bonds could almost double its property, paying for 75 per cent of the additions in bonds, without breaking the 60 per cent rule. In this respect, the past financing policies of a corporation, although not conclusive, are indicative of likely future practice.

3tortgage-13o.ncl indentures also often permit the expansion of debt as lon as the Rings trrthyears precrial cirig176 equal to one an three$_z$ fourffis times thb interest charges, incidditig those abutrt VOThe assumed. Sikh a provision need not be used as a standard for ordinary financing by the utility, but it permits normal financing at a time when earnings are temporarily depressed to a point below the conventional two times coverage. It also permits the raising of a reasonable amount of funds for expansion through bonds before the additional property is completed and able to contribute to earning power. When bonds are being issued to acquire established properties, the definition of earnings is framed to include the earnings of the property about to be acquired, but the interest on any existing mortgage debt on the property should likewise be included in the charges for which coverage is computed.

The definition of earnings for a restrictive indenture provision, such as has just been described, requires care. In general, an attempt is made to frame the definition so as to describe the ordinary and regular income upon which bondholders may rely for the payirentof their interest claim Extraordinary and nonrecurring items that are not connected with normal operation should be excluded. The definition might even exclude nonoperating income from stock investments if the latter were felt to be a more unstable basis than operating income for the support of fixed charges. Income taxes,

additions and betterments to its properties; (c) for 75 per cent of the cost or fair value (whichever is less) of purchased properties acquired by such a subsidiary; (d) to refund par for par the indebtedness of such a subsidiary; (e) par for par against the deposit of divisional bonds; (f) par for par against the deposit of cash or United States obligations; and (g) for refunding an equal principal amount of bonds of other series issued under the indenture. The total amount of bonds issued in respect to any subsidiary, together with the principal amount of all mortgage indebtedness upon the subsidiary, is not to exceed 75 per cent of the cost or fair value (whichever is less) of the properties of the subsidiary.

Such a 75 per cent limit is in interesting contrast with the 100 per cent permitted by one of the earliest open-end mortgages created by a utility, the Chicago Railways Company (1907),

Which are payable only from any surplus after interest, would not be deducted in computing the available net income. Provision might be made to require the inclusion of sufficient maintenance and depreciation allowances to insure the operating properties against an impairment likely to affect their earning power.[14] The depreciation charge does not necessarily represent cash expenditure in the year in which it appears in the earnings statement, but, if correctly stated, it will over a period of years call for cash, in order that the replacements allowed for may be made.

....1112—clebelature bond is not found regularly in utility operating,
i 40 uW When it does occur in an electric utility, the
ietrunture is gi ally employed at a time when either the lowered earnings of the c9rgoration or an adverse imre'gtme nt market makes a7M'TrorFOck impractical. The customary mortgage bond may be unavailable beezuse of indenture restrictions or because of the desire to avoid lowering the rating of the regular mortgage debt. It is wiser to pay a somewhat higher interest rate on a relatively small debenture debt than to risk the future standing of the more important mortgage debt. Provision should be, and usually is, made for the early retirement OTTeheriture de o

Provisions for ritiretifelit either 6rough seriaTmaturities or sinking fund are the exception in utility bonds. Such has been the assurance as to the permanence of this growing industry, which enjoys a preferred monopoly, is sanctioned by public regulation, and supplies an essential service. Occasionally, 1yb_e cular issue_ raises the tota bt to a point that seems high or is issueT'an7triine air epression makei toririVestment pessimism a sinkin fund fea ay e fo Such a retirement clause is most often asso= crate wi debenture iSsues. As aIready suggekkd, "utility de- en to indicatedebt in excess of the conventional limits

[14] The indenture of the Public Service Company of Colorado goes one step further and provides that no cash dividends may be paid on the company's common stock unless there has been expended or reserved annually (cumulative) for maintenance and depreciation at least 12 per cent of the gross operating revenue from electric operations, 10 per cent from gas operations, 71 per cent from heating operations, and 20 per cent from transportation operations. These percentages are subject to arbitration and adjustment at five-year intervals.

"Its exceptional use as a substitute for the mortgage is mentioned later in this chapter as a phase of telephone company finance

An unusual but appropriate use of debentures by a "parent" operating company is found in the refinancing program of the Commonwealth Edison Company in 1938 and early 1939. A total of $129,431,400 20-year convertible debentures with a coupon rate of 3.5 per cent was offered to stockholders by means of rights, and the proceeds were used to retire the recently acquired subsidiary's funded debt and preferred stock, which bore higher rates. If complete conversion followed, as seemed likely, the proportion of debt to common stock would be reduced from 73.6 per cent to 56.2 per cent, and fixed plus contingent charges would be reduced by one half, restoring the original conservative financial structure of the parent company.

for ordinary mortgage bonds. Where the feature has been included in a mortgage issue for any reason, possibly to add sales attraction to a less esteemed issue, it may provide that sinking fund payments may be invested in property additions.[16] This alternative amounts to a suspension of sinking fund and is indicative of the strenuous efforts employed by this rapidly growing business to use every means to obtain funds needed for growth. Should the industry reach a more mature stage, in which growth became slow, such a feature and the maximum use of debt would tend to disappear.

Because utilities are under less pressure to reduce and eliminate debt than industrials, and because their bonds al:o_zohizhly rated as to make special indildemiragifor -prirthAge' unnecessary, Tre C73:' bjeTiatitr,..Qis employed infrequently. When the device is used; the same generarpTeTaiffigis apply as inother fields. The danger to the ,nananzon stockholders of dilutign,, in-the,value of their ghares.' eneroulconversion terms is more rea dily deter mined than in e case of incluaiiiNorpOraTions. Under commission regulation both earnings and property values should be more stable and predictable. Earnings will tend to be more closely related to the tangible property investment, so that dilution in any large way should be more obvious.

Use of Preferred Stock

While bonds have been used almost invariably in the financing of operating electric utilities, preferred stock has been frequently employed. Whereas bonds have appealed to institutional and other buyers of the most conservative type, the preferred stock has met favor with individual investors who wanted more regular and certain income than would be provided by common stock but were willing to assume the greater risks of preferred for the higher yield which it offered in comparison with bonds. In this fashion preferred stock reached a capital market not readily approached through either bonds or common stock.

The considerable sale of preferred stocks to customers by the electric and gas companies in the 1920's assumed such proportions as to be known as the "customer .w ship movement," although they were ,sold,-. also to emp oyees and the genera inves merita Iplic to some extent. Since the voting control arid the fluctuating residuum earnings—the characteristic qualities of true ownership—usually go with the common stock, the appellation is somewhat misleading, even though a small amount of common stock was sold in these campaigns. The dividend rates on these preferred shares

[16] The mortgage for the Central New York Power Corporation's general mortgage bonds provides for an annual payment of 1 per cent of the 31 per cent series, due 1962, to be used for either retirement or improvements (an asset expenditure). Such a "sinking fund" might never retire any debt.

were characteristically 6 and 7 per cent and so probably from 1 to 2 per cent above the rate most often paid upon funded debt. [17]

Preferred stock limits. As to the proper limits for preferred stock, definite standards are lacking. The small individual investors who purchased it were not likely to have precise notions of safety requirements. Because the stock was generally sold directly by the company, often as a part-time activity of regular operating employees, the influence of the investment banker was absent. The rule has been suggested that preferred dividends should not exceed one fifth of the net remaining after interest charges (and preferably income taxes). [18] Such a restriction would permit a very low coverage, as may be seen from the following figures, in which interest is one half of net income after all taxes, and preferred dividends are one half of the balance after interest.

Net income after all expenses and taxes . . .	$1,000,000
Bond interest.	500,000
Balance for dividends	$ 500,000
Preferred dividends	250,000
Net for common stock	$ 250,000

Coverage for bond interest = 2 times.
Coverage for combined interest and preferred dividends = 1.33 times ($1,000,000 ± $750,000).

The combined charges should probably not exceed two thirds of the net income available in years with normal business conditions, or, stated in the form used above, the combined coverage should be as high as 1.50 times in ordinary years. If the funded debt did not exceed 60 per cent of the capital structure, and the preferred stock did not exceed one half of the balance—that is, 20 per cent—it should not be difficult to meet this stricter requirement. The following figures, in which a rate of 7 per cent earned on total investment is assumed, illustrate conditions not unusual during the 1920's:

Capital Structure	*Rate*	
Bonds	$ 60 X 5%	= $3.00
Preferred stock	20 X 7%	= 1.40
Common stock equity	20	
Total	$100 X 7%	= 7.00

$7 ± ($3.00 + $1.40) = 1.6 times for combined coverage.
$2.60 - $20 = 13% return on common stock equity.

[17] This movement is more completely described in Chapter 17. As to the influence on capital structures, see H. P. Bruner, "Influence of Customer Ownership on Financial Structure of Public Utilities," *Journal of Land and Public Utility Economics,* October, 1925, pp. 459-468. See also Ralph E. Heilman, "Customer Ownership of Public Utilities," *ibid.,* January, 1925, pp. 7-17.

[18] A. S. Dewing, *Financial Policy of Corporations* (New York: Ronald Press Co., 3rd rev. ed., 1934), p. 1075, footnote k.

In practice, the rates shown on the preceding page as paid upon bonds and preferred might have been nominal rates, in which case allowance would be necessary for the discounts or expenses in selling the issues, making for a real capital cost in excess of that shown and a lower return upon the common stock equity.

With a lower level of interest rates, the figures on the preceding page might read as follows:

Capital Structure	*Rate*
Bonds	$ 60 X 4% = $2.40
Preferred stock	20 X 6% = 1.20
Common stock equity	20 X 10% = 2.00
Total	$100 ..... $5.60

In the first case, the company was assumed to earn 7 per cent upon its total investment; in the second, it was assumed to earn only enough to allow a 10 per cent return on the common equity, with a resulting percentage earned on its total investment only slightly in excess of 52 per cent.

A restriction upon the issuance of preferred stock based upon capital structure figures would seem a desirable supplement to any earnings rule. Unless the funded debt is unusually low, it would appear desirable that the common stockholders' investment be as large as that of the preferred stockholders. The objective should be to make fairly certain the continuance of preferred dividend payments even in poor years. An accumulation of unpaid preferred dividends is bad for financial prestige. It might also interfere with the resumption of normal well-rounded financing of growth after a period of depression-an important consideration in an expanding business, which leans heavily upon new financing to supply its growth needs. A study of capital structures shows that preferred stock is used to increase the net worth and bolster the position of the bonds rather than as a substitute for funded debt in order to reduce the hazard from fixed charges."

"Southern California Edison is an exception, offering an example of an unusually heavy use of preferred stock by an operating electric utility. The shift from a preponderant use of bonds to preferred stock seems to have received its impetus from the unusual depression in earnings in 1924, when drought so increased the operating costs for this hydroelectric company that coverage of interest charges dropped from 3.13 to 2.01. The following figures tell the story of changed policy:

(dollars in millions)

		Increase in Outstanding						
	Total 1924	*1925*	*1926*	*1927*	*1928*	*1929*	*1930*	*Total 1930*
Bonds	$114.6 60%	$ -1.5	$ 4.8	$17.1	$ -10.8	$15.6	$ 1.0	$140.8 41%
Preferred	27.5 14	22.0	12.7	25.7	16.7	3.1	4.1	111.9 32
Common stock equity	50.1 26	3.7	1.0	6.2	5.1	14.0	10.6	90.6 27
	$192.2 100%							$343.3 100%

Source: Moody's Manual *of Investments,* PubU...: *Utilities* (annual).

This attitude toward operating utility preferred stocks, plus their generally satisfactory quality, means that they are not ordinarily convertible nor the beneficiaries of other privileges. Sinking funds are also absent as a rule, though the precaution of a callable fea Lure is likely to be present. They wohId ordinarily lack the voting privi- Tee.

Common Stock

The rapid growth of the electric utilities in recent years was suggested as an important reason for their use of prior securities. The regulation of earnings meant a more moderate return than might be expected in similarly expanding competitive industrials. To some extent this regulatory limitation might be regarded as a handicap to the sale of utility common stocks. However, the use of low-yielding prior securities has made it possible to offer a higher return on the common stockholders' investment and so increase its attraction: Theoretically, it might be argued that the increased hazard from using bonds and preferred stocks would counterbalance this additional income and so prevent the common stock from being more attractive than when it had a lower return but fewer prior obligations. In practice, the extra earnings from "trading on equity" are often regarded by investors as more than sufficient to serve as a "premium for risk" when the proportions of the several securities are judiciously mixed. Therefore the use of bonds and preferred stocks has undoubtedly made possible more attractive common stock while earnings were not at so high a rate of return upon total investment as would otherwise have been necessary to attract the needed money. When the rate of growth of the electric companies slows down—t , n the i6 corpora titalb approach Maturity and so nee ess funds—or when the size of the company has given its stock aaequate prestige, the sale of common stock should be a relatively easier means of raising needed money. The larger metropolitan electric companies provide prominent examples of sufficient credit Tripre stigtr to permit the ready sale of common stock to such an e)Reirt-that pieferred stock is not found in the capital structure. [20] One of the potent influences that encouraged the growth of electric utility holding companies was the facility with which they raised

[20] Thus, large metropolitan companies using no preferred stock include the Boston Edison Co., Detroit Edison Co., Commonwealth Edison Co. (Chicago), Cleveland Electric Illuminating Co., Brooklyn Edison Co., and New York Edison Co.

On the other hand, some large companies still have preferred stock—for example, the Consolidated Edison Co. (New York), Consolidated Gas, Electric Light & Power Co. of Baltimore, Duquesne Light Co. (Pittsburgh), Southern California Edison Co. (Los Angeles), Pacific Gas and Electric Co. (San Francisco), Philadelphia Electric Co., Indianapolis Power & Light Co., and Laclede Power & Light Co. (St. Louis).

junior capital for their smaller and less-known operating subsidiaries. By the sale of their own more widely known issues, they raised the money to purchase the common stock of their growing operating subsidiaries.

As operating companies grow in size and prestige, their common stock would be expected to sell more readily and tend to displace preferred stock, so that capital structures would show only bonds and common stock. Furthermore, when money may be raised readily through the sale of common, manage ean less heavily upon bondz-fmaricing----antl erw—a--more conservatKe debt percentage. To the extent that The operating companies grow sta tirtheir-TriVii right, the virtue of the holding company as an aid to financing the common stock equity diminishes. [21]

Gas Companies

Factors affecting financing. The foregoing discussion has drawn largely on the experience of the electric utilities. Before passing to certain general problems of utility finance, a brief description of the points of difference from the other fields as far as they affect financial policy is appropriate. Most osel related to the electric utilities are the gas companies. In 12 of the 40 cities of 250,000 popuralion or over (T935T, gar and electric properties were found under the same corporate tent. [22] Certain economies result from the joint operation of the two businesses in a given community, particularly in the service of the small residential customer, where the cost of such items as meter reading, billing, and collection may be a significant part of the total monthly charge. In financing, the combined properties have the advantage of more imposing size and such added strength as may arise from the diversification of interest. The possible loss of business by one property to the other is less important when they are divisions of the same corporation. During the 1920's the rapid reduction in production costs placed electricity in a strong competitive position in some communities for domestic cooking purposes. To some the situation seemed parallel to that of a few decades before, when electricity had pushed gas from the il-

" The holding company may on occasion purchase other securities besides common stock. An illustration is found in the American Power & Light Company, which at the end of 1936 reported bonds, loans, or other advances to 10 of its 17 subsidiaries. Presumably such debt was not readily salable on advantageous terms in the open market.

Data drawn from Moody's *Manual of Investments, Public Utilities,* 1936. In cases where one property was a corporate entity but a subsidiary of the other, the two were treated as a single company. Among the 14 very large metropolitan communities mentioned in footnote 20, both services were rendered to three by a single company and to eleven by two corporations. The three former communities are San Francisco, Baltimore, and Manhattan.

lumination field. At that time the gas business not only survived but grew by expanding into the domestic cooking and heating fields. Recently the gas business has taken on new life in many areas through the introduction of natural gas brought in by long-distance pipe lines. This new gas, which is cheap when measured in terms of heat value, has expanded potential markets, particularly for domestic heating and industrial fuel.

Natural gas is ordinarily an incident in the production of petroleum, and so its financing would fall in the same subdivision of industrial finance. Pipe lines to bring the gas from the oil field to the consuming cities would also have a useful life limited to the life of the gas supply and so have similar problems of finance. In some instances however, companies retailing manufactured gas have found it desirable to make investments in companies engaged in the natural gas business in order to obtain a source of supply under favorable conditions. They have given other indirect assistance to the natural gas business by contracting to purchase certain amounts over a period of years, thereby in effect underwriting the financial future of the vendors to a limited extent.[23] The possibilities of profitable expansion through the use of natural gas appear to be considerable for the immediate future. Looked at over the longer term, however, the gas utility which comes to depend for its market upon a low-cost supply of natural gas of limited life is in a weak position, which should be taken into account in planning capital structure. The exhaustion of the natural gas supply and a switch to higher production costs for manufactured gas might cause the loss of the company's customers. Debt maturities should be suitably limited, and a program for the retirement of preferred stocks and bonds would appear a conservative and prudent course.

Those gas companies which are not joined with the local electric companies have followed the same general principles and employed the forms of finance as outlined for the electric companies. Some slight differences can be attributed to the much slower growth of the gas business in recent years. In view of the declining trend of rates for electricity, it would appear desirable for the gas industry to pursue a most conservative attitude toward its debt, pointing to its ultimate elimination.

23 The Peoples Gas Light & Coke Co. introduced natural gas into Chicago in 1931. The gas is brought to Joliet, Illinois, from the Texas Panhandle by the Natural Gas Pipeline Co. of America, in which the former company has a stock interest. The gas is picked up at Joliet by the Chicago District Pipeline Co., a wholly owned subsidiary. In 1933 the Illinois Commerce Commission disapproved the 1931 contracts on the grounds that the price paid for the natural gas by the distributing companies was excessive. The Peoples Gas Light & Coke Co. was obliged to accept the downward revision in purchase price and to lower its rate to consumers.

The Telephone Industry

Financing the Bell System. The telephone industry has become practically synonymous with the American Telephone and Telegraph Company's nationwide system. This company is primarily a holding company, although it owns certain interconnecting toll lines, which represent about one tenth of the system's operating property. The bulk of the telephone operations are conducted through 19 regional operating companies, which cover the United States.[24] The holding company owns almost 100 per cent of the common stock of 16 of these, a large majority of the common stock of three more, and a substantial minority interest in two "associated" companies, the Southern New England Telephone Company and the Cincinnati & Suburban Bell Telephone Company. It also owns an interest in the Canadian and the Cuban telephone businesses.

Financing has been,...cvarried_aut in part through bonds and preferred stocks of the, operating cornpaiiies:- --At tlie end of 1938, ten of the subsidiaries had bonds outstanding '(including only those with issues in excess of $1,000,000), and three had preferred stock out. One advantage of keeping the present subsidiary issues is that they_ permit certain insfitiltiorial invest-ors -t-o ilivesf larger sums in the system's securities. Because the bonds or preferred stocks are issued by separate corporate entities, the restricted investor can buy each of the issuers' securities up to the limit set by law. The relative importance of these subsidiary issues is seen in the capital structure figures on the following page.

These figures show how the subsidiaries have come to occupy a small place in the financing picture. This condition speaks highly of the standing of the holding company, because ordinarily the mortgage debt of the operating companies offers a utility system an unequaled means for obtaining a substantial part of the needed investment at a low interest cost. So unusual is the position of this system that in 1937 it substituted a debenture for a mortgage issue in one of its operating subsidiaries. The Southern Bell Telephone and Telegraph Company called its first mortgage 5's of 1941 and sold an issue of 31 per cent debentures. Although the absence of a lien barred the issue from savings bank portfolios in some of the more important Eastern states, the issue found acceptance by other institutional buyers, who were able to buy this high-quality issue (sole funded debt) without regard to the lacking feature. The company saved the minor legal costs of a mortgage, particularly the expense

[1]Five other companies are controlled indirectly through three of these operating companies, making 24 operating companies in all, besides certain subsidiaries manufacturing equipment, conducting research, and owning real estate.

of registering the lien in the scores of counties in the several states where it operates. The influence of the unusually favorable bond market at the time of this financing should be recognized as another factor making it practical.

An unusual feature of the debt is the presence of a substantial amount of notes sold to the pension trust funds established by the company and its principal telephone subsidiaries. Ordinarily such a procedure would be undesirable because (1) such a fund should be suitably diversified as a matter of sound investment policy, and (2) it is objectionable for a corporation to be a borrower from a fund which it is creating for the benefit of others. This particular situa-

CONSOLIDATED CAPITAL STRUCTURE OF THE AMERICAN TELEPHONE AND TELEGRAPH COMPANY
(dollars in millions)

	December 31, 1938		*December 31, 1926*	
Funded debt:				
Subsidiaries	$ 524	14%	$ 537	22%
A. T. & T.	430	12	385	16
Notes sold to pension fund:				
Subsidiaries	114	3		
A. T. & T.	7	—	—	—
Subsidiaries' preferred stock	43	1	110	5
Subsidiaries' common stock*	89	2	90	4
A. T. & T. capital stock	1,869	52	1,064	45
Surplus:				
Premiums paid-in	270	7		
Reserved	71	2	196	8
Unappropriated	238	7		
Total	$3,655	100%	$2,382	100%

* Including minority interest in surplus.
Source: Annual reports of the company.

Lion is unique in that the company is not only in an unusually strong financial position but is also national in scope, giving it geographical diversification, so that it is difficult to imagine a disaster likely to affect the safety of its debt, short of a revolution in the art of communication or a national catastrophe of such magnitude that it would engulf almost all forms of debt investment. At the time of the 1938 balance sheet, the fund was particularly favored by this investment, since the bulk of these notes were payable on demand and bore a 4 per cent interest rate, or more than was being paid by the company on new bond financing at the time and much above the nominal rates being paid (less than 1 per cent) for prime open-market borrowing of a short-term character.

Although the holding company has in the past used secured col-

lateral trust obligations, it has in recent years found it convenient to employ debentures. These bonds have sold on a yield basis very close to that of the bonds of the operating companies, a condition not too difficult to understand in the light of the relatively small volume of prior obligations shown in the figures. above. Furthermore, with respect to the operating properties of the holding company and also some of the operating companies, the American Telephone and Telegraph debentures are the first claim upon earnings. They enjoy a better diversification factor and somewhat more active market than the operating company bonds.

The trend toward a diminished use of both bonds and preferred stocks is apparent in the comparative figures given. Such a large use of common stock is practical for a utility with a widely established prestige that has given its common stock an investment rating. No other corporation has such an extended list of stockholders.[25] This prestige has been enhanced by an unusually stable dividend policy, which, while removing some of the stock market glamour, has been a prime attraction to a wide range of investors both small and large.[26] That the more prominent use of common stock by this system has been a matter of policy plus opportunity and cannot be attributed to any desire of management to hedge against greater risk than in the electric utility industry can be seen by a comparison of the record of the company with that of representative electric companies.

Table 16 shows the relative earnings fluctuations of the American Telephone and Telegraph Company and of some of the leading metropolitan electric companies through a major depression. While the figures show the largest decline from the 1929 level of earnings for the American Telephone and Telegraph Company, the difference between its performance and that of the metropolitan electric companies is not great. The differences would have been reduced somewhat if 1930 had been chosen as the initial or base year instead of 1929. Measured from the lower level of 1930, the American Telephone and Telegraph decline would have been a smaller percentage, while the percentage decrease for those companies which had higher earnings in 1930 than in 1929—as was true of many electric utilities —would have been larger. The unusually conservative capital structure of the telephone company made it better able to bear its reduced earnings. Even the fortunate Southern California Edison felt obliged to reduce its dividend in 1934, while the dividend rate of American Telephone, initiated in the second quarter of 1921, continued unchanged throughout the depression period shown in the table.

"647,000 as of December 31, 1938.

22 $7.50 per share, annually, 1900-1905; $8.00, 1906-1920; $9.00, 1921 to date.

TABLE 16

RELATIVE CHANGES IN NET INCOME BEFORE INTEREST CHARGES FOR THE AMERICAN TELEPHONE AND TELEGRAPH SYSTEM AND SOME LEADING ELECTRIC UTILITIES

(1929 = 100)

	1929	1930	1931	1932	1933	1934	1935	1936
Am. Tel. & Tel. (consolidated)	100	97	94	72	58	63	69	85
Boston Edison	100	110	108	109	98	92	82	79
Commonwealth Edison	100	105	100	74	73	71	78	79
Detroit Edison	100	90	92	68	67	72	86	89
Southern California Edison	100	103	97	90	83	81	87	92

Independent telephone companies. In various localities, service is rendered by independent telephone companies. About--15 per cent (1932) of the country's telephones are owned by thesecompanies.[27] Their financinf problems have tended to resem e those Orgimilarly situated electric companies. Tle—re12.ti-v-gly-pADarmarket for their stock has been a strong_reasouJor_using_bonds to nance growtE. Even bonds of these units suffer in comparison with Eō7C orilie A. T. & T. system as a result of less diversification of interests and less conservative financial practice.

Other Utilities

Street and interurban railways. This group of utilities was formerly of first-rate financial importance, as evidenced by the census data shown in Table 17, which indicates the cycle through which the group has passed. These lines were known as the electric railways to distinguish them from the steam railroads, a distinction that is no longer so clear since the introduction of gas and Diesel buses by local traction companies, and the increasing amount of electrified mileage by the "steam" railroads. Traction companies have been interested in passenger rather than freight movement.

TABLE 17

FINANCIAL IMPORTANCE OF STREET AND INTERURBAN RAILWAYS, 1890-1937

	1890	1902	1912	1922	1927	1932	1937
Miles of line	5,783	16,645	30,438	31,264	27,948	20,110	14,214
Capitalization (millions of dollars)	449	2,308	4,709	5,447	5,474	5,083	4,900
Revenue passengers (millions)	2,023	4,774	9,546	12,667	12,175	7,956	7,485
Gross revenues (millions of dollars)	91	248	568	1,017	919	566	513

Source: Moody's *Manual of Investments, Utilities,* 1939.

" The companies "associated" with the A. T. & T. system through substantial minority stock ownership are excluded from this number. In a few instances the holding company has been used in the independent field.

With widespread use of the private automobile and the bus lines, the electric interurban companies have almost disappeared. Those which remain are likely to represent suburban lines serving metropolitan areas, an extension of local transport service, rather than genuine long-haul intercity movement.[28]

Local intracity transportation also lost traffic to the private automobile. In the smaller communities traffic became inadequate to support even the operating costs of the electric railway. In some places systems had to be abandoned; in others buses were substituted, the bus with its smaller investment being a more economical transportation unit where traffic is sparse or irregular. In larger cities, where dense street traffic and lack of parking facilities made large-scale mass movement imperative, the electric railway remained. A unit capable of carrying a substantial number of persons is essential for economy and efficiency of movement where numbers are heavily populated area can the large investment of an elevated or subway line be supported. Such lines, removed from the street, are able to move people in trainloads instead of in carloads, and at higher speeds.

The record of past financing has but small value to the student of finance save in a negative way. Too often financial procedures have been of a type that would be avoided today. The bulk of the investment in traction property was made prior to the World War, and most of that before any effective measure of utility regulation had been obtained. Excessive funded debt was not unusual, and common stocks issued values. Abuses and irregularities placed the industry in a bad position to meet adverse conditions. Subsequent lowered earnings in the presence of heavy interest charges made the financing of improvements or extensions difficult.

Sometimes franchise troubles added a further problem. In the days before commission regulation was common or effective, the street railway was granted the privilege of operation for only a limited number of years. At the expiration of the franchise period, the city was in a strong bargaining position to insist upon rate changes or service improvements that it thought desirable. With reasonably effective commission regulation such adjustments should be obtainable at any time rather than at long

28 Interesting examples of survivors which carry a mixture of suburban and interurban passenger traffic are the Chicago, South Shore and South Bend Railroad, the Chicago, Aurora & Elgin, and the Chicago, North Shore & Milwaukee. Even the last-named, which runs from Chicago to Milwaukee, derives a major share of its traffic from commuters between Chicago and its North Shore suburbs. Although modernized service gave their business a fillip in the 1920's, all three roads subsequently went into receivership.

intervals. Inability to obtain the renewal of a limited franchise may constitute a continuing threat to investors, who have no means of withdrawing their very fixed investment in property even though the conditions demanded for renewal are extortionate. The tendency in recent years has consequently been toward the use of an "indeterminate" franchise—good as long as the utility performs its functions reasonably well. 11 some cities, FieW ever-, "the frinchise s'lltl constitutes aliiOblem that complicates financing.[29]

Where conditions permit normal financing, the principles developed for other utilities should be followed in this field. Recognition of the more uncertain outlook for the tractions would, however, result in planned debt retirement. Funds for the purchase of equipment might be obtained by the equipment trust Certificate or from current funds as they accumulate when old equipment is depreciated and retired. Other bond financing for more permanent fixed assets should provia for sirikin rfund retireitisht in order to provide against the demonstfared-usGer-taintes that arise from possible changes in the art of transportation and changes in character of urban population distribution that may alter the flow of traffic. Since new financing has been of small consequence in recent years, this tendency is most likely to appear in refunding operations."

While the decline of tractions has reduced their importance to the student of finance, the experiences in the field have a broad interest because of the light they throw on certain points that need to be kept in mind in the financing of the utility industry. lii the fir place, their troubles show how neither monopoly nor regulation can abolish rigE Wreri a market shrinks- for a utility service, there rosy Verio Way of obtaining a fair return upon the huge immobile investment. Neither higher nor lower rates may give revenues adequate to produce reasonable earning power.

In the second place, the history of traction shows how much more vulnerable to attacks a utility becomes after, it has ceased to grow mirexil aid. To ruin a young utility is to destroy its credit, whit' it needs in, order to expand Tre Reffi'ee needed by the conam Those who wou burn by a ack crtllie hopea-Tor service are potential defenders of the utility's rights. When the utility has noth-

(\.9

29 In Chicago an expiring franchise coincident with maturing bonds threw the surface lines of that city into receivership in 1927. In spite of continuing substantial earnings during the following years, negotiations were still in progress in 1940 and the companies were still in receivership. The resulting losses to investors were substantial.

" An example of an unusually substantial sinking fund may be studied in the terms of the Market Street Railway Company (San Francisco) first sinking fund 7's of 1940, issued in 1924 to refund maturing bonds and notes. The serial type of retirement, which is exceptional in utility financing, was used in the Brooklyn-Manhattan Transit Corporation collateral trust 3's and 3t's due 1937-1951.

ing to offer but continued operation, the general public is not apt to be concerned about the corporation's credit, at least not unless the service is seriously impaired.

A third point is the lesson that the financial health of a utility requires favorable public relations. The early abuses in the traction industry placed it in the weakest position of any of the utilities, while the telephone industry has pursued policies which have, in marked contrast, resulted in the most favorable public relations. In this connection, the common tendency of the public to condemn an industry on the basis of the well-publicized sins of individual companies should be remembered. Public hostility will be reflected in the investment market by estimates of higher risk and increased cost of financing, particularly for stock issues. Because attacks upon the utilities appear to be valuable political ammunition, each of the utility industries has a substantial interest in the pursuance by other members of policies that are not merely sound but will be above suspicion and reproach. As with Caesar's wife, good repute is necessary as well as virtue.

While attacks upon the rates charged by utilities as excessive may be, and often are, soundly conceived and based upon factual evidence, they may represent a device of those ardent for government ownership at any price. Such advocates may feel that, if a utility can be financially crippled, so that service is impaired, equipment is allowed to grow obsolete, and even minor extensions are difficult to finance, their plea for government ownership will find sympathy among many who are inconvenienced by defective service but have no particular animus against private operation. In New York City the five-cent fare has engendered such political heat that any objective settlement of its merits or adequacy under post-War operating conditions is impossible. With reduced corporate credit the only means of providing for expansion facilities was by the use of municipal credit. Lest it be felt that low fares are a boon only to the great masses of urban population who ride daily, it may be pointed out that commercial interests in the great central shopping district are substantial beneficiaries. Furthermore, real estate interests on the rim of the district served so cheaply are probably able to charge somewhat higher rents and realize somewhat higher land values as a result of a five-cent fare. Below-cost transportation becomes the subsidy of our leading metropolis to further congestion.[31]

In concluding the discussion of tractions, the financial peculiari-

[31] The authors would not have it understood from the above discussion that they are opposed to subsidies as such. Public education is a good example of a generally accepted subsidized activity. The community should have a clear idea, however, of what and whom they are subsidizing. In the New York traction situation, the fact of subsidy is faced with unwillingness or even denied.

ties of those companies which have given up entirely the use of electricity for gasoline- and Diesel-powered buses should be noted. The transition results in the loss of most of the financial and economic—although not the legal—characteristics of a utility. Gone is the heavy investment in roadbed—rails, ties, ballast, and paving—and in electric transmission facilities—poles, trolley wires, and transformers. The fixed property shrinks in importance in relation to sales. Financially, a bus company is in a class with the industrial corporation, much as is a cab company or a steamship line. While a franchise will usually be required, as for an electric street railway, the use of the public streets is not much greater than that of other traffic. That bus companies continue as regulated business and generally as monopolies is partly due to their succeeding street railways, partly a matter of regulating traffic, as cab companies are controlled in major cities, and partly to obtain more stable and uniform rates and service. If allowed to lapse into the competitive state, bus companies would tend to concentrate on the more profitably dense traffic routes. Difficulties might ensue in securing adequate service in certain sections of the city and at certain hours. The legal and public relations aspects of the bus company will continue along the lines of those of other utilities, but on the financing side something more closely resembling industrial policy would appear logical. Common stock financing might be supplemented by the occasional usd of secured serial debt to acquire new equipment, just as automobiles and trucks may be bought on the installment plan. If equipment is replaced on a regular year-by-year plan, however, even debt for "installment" buying of, equipment should be unnecessary. The funds to replace old equipment should come naturally from current operating revenues.

Water companies. Thaaya-ter_husiness is the oldestath probably the most essential of the utilities. Changes in the arts are hardly likely to make ifs ¯ifiiiieWg ¯dbs7ete. The operating expenses, which are due to pumping, filtration, chlorination, billing, and collecting, are likely to be l"in relyC on to the total cost of service ¯than f6 any other type of utility except some of the hydroelectric properties. To say that the water business has a characteristically low operating ratio is merely to point to the "capital service" nature of the business. In consequence, the cost of the invested funds is the most important single element in the cost of water service. This factor and the relatively routine nature of the operations explain the frequency with which the business is conducted by the municipality instead of by a private corporation. If a private company required 6 per cent as a return upon total investment in order to raise the needed funds, while a municipality could borrow at 4 per cent, the saving would represent a reduction in the cost of the investment

factor by one third. If return to investors constitutes 60 per cent of the budgeted revenues (that is, a 40 per cent operating ratio), then the saving, when related to the total cost of service, would equal 20 per cent (one third of 60 per cent related to total revenues of 100 per cent).

The financial relationships for a group of water properties may be seen in the combined figures for the water subsidiaries of the American Water Works and Electric Company shown in Table 18.

TABLE 18

CAPITAL STRUCTURE AND CONSOLIDATED EARNINGS OF SUBSIDIARIES OF AMERICAN WATER WORKS AND ELECTRIC COMPANY FOR 1935

(dollars in thousands)

Combined Capital Structures

Bonds	$67,743	58%
Preferred stock	12,868	11
Common stock and surplus	36,896	31
Total	$117,507	100%

Combined Income Accounts

Operating revenues	$12,876
Operating expenses, maintenance, and taxes	6,588
Net operating income	$ 6,288
Nonoperating income	48
Gross income	$ 6,336
Interest, etc	3,856
Net income	$ 2,480

These figures show a total capital structure nine times the gross operating revenues for the year 1935. If the capital structure is assumed to be substantially equal to the operating assets, the turnover of the latter is but one ninth. Under the circumstances the ratio of operating expenses to revenues is fairly high-51 per cent—because it leaves only $6,288,000 as a return upon the operating investment, or 5.4 per cent upon the total capital structure. If revenues were unchanged, the expenses would have to decline to 46 per cent before the total income would equal a return of 6 per cent on the total capital structure, and to 37 per cent before the return would be 7 per cent.

Since the cost of invested funds is so important a part of the cost of the water, any change in the rate of return upon investment is important to the water consumer. Since the average municipality is able to borrow at considerably lower rates than the average private water company, the former has that much advantage over the

latter. Only one city with a population over 500,000 and only six more with populations over 100,000 are served by private water companies. Probably less than a half billion dollars of private waterworks securities are on the market. Their financing will follow the lines suggested for the financing of electric utilities, although the stability of their business has caused a number of companies to use bonds for from 60 to 80 per cent of their capitalization.

Problems of Utility Finanqe,

Regulation. Of the general problems affecting -utility- finance, three are of first-rate importance: regulation, debt' planning, and government ownership and operatimi - Regulation of utilities is conducted chiefly by state commissiOli syt Those chief functions are 51 --tO" control rates, so fh Trifie Y - ni ay be reasonable and fair to both the consumer an e . • • , td - grAnt the right of operation in new territory in order to prevent unnecessary duplication of facilities, (c) require a reasonable quality of service, (d) to specify suitable accounting records and financial reports, and (e) to approve --aw---fintrirc iiii_ or changesiricapital - strifetfire. Occa Abnally the 16al - rifird Erra lity has a voice in some Of the 56 matters, as upon the occasion of a franchise renewal, although for the most part the city has been more and more restricted in influence until its chief recourse is to intercede before the commission. [32] The Federal Power Commission, first created in 1920 to regulate hydroelectric projects located on "navigable" streams, was given additional powers by the Public Utility Act of 1935. These powers will be used chiefly to supplement the work of state commissions by regulating rates for power transmitted across state lines.

Of the various regulatory functions, that governing security issues is of chief importance in this discussion. The other work of the commission, particularly rate regulation, has large indirect importance, because with inadequate earnings attempts to finance will be handicapped or made impossible. Since all new issues must be submitted to the state public service commission before they are offered to the public in many states, including most of those of commercial importance, the commission is in a position to prevent issues in excess of the` reasonable value of property owned and acquired, issues for purposes which are deemed improper, or forms of securities which are regarded as unsuitable. Generalizations are difficult because practice varies from those states in which regulation is detailed to those in which no regulation exists. Some are inclined to regard control in this direction as an invasion of the functions of private management, but most are doubtless favorable,

" Some communities have "home rule," whereby certain utilities are under the control of local municipal boards.

on the grounds that utilities as a whole are aided in their financing by the prevention of ill-advised practices by individual companies, which might reflect discredit upon the industry and so raise the cost of funds. While acceptance by a regulatory commission does not guarantee the quality of a new security issue, it does tend to eliminate many of the worst abuses of private finance of the pre-SEC variety.

Debt policy. The actual policies of utilities with respect to debt financing have been described. The question of possible improvement in method arises. Should the funded debt the treated as permanent? The tacit assUmption that it should has been Iehixid the Urge of long-term debt.. The extremely long maturities of fifty years or more that were employed in railroad finance have been generally absent from operating utility company finance. Nevertheless, the common use by utilities of maturities running between twenty and thirty years means that the question of capital structure rearrangement need not be faced except at very long intervals, during which great changes can occur. When heavy blocks of such debt do mature, the amount is so large that almost no other course but refunding is practical.

Someixametalen the extr pAsitilan—that_n11_debLs140111d_he_ret ec by sinking funs. Since such sums must come from earnings, it is but an indirect method of requiring stockholders to leave a part of their return in the business to take the place of the investment of bondholders.[33] If the stock of a utility is to be made attractive enough to permit its use in financing expansion, it will be necessary to allow a return upon this added investment of the stockholder. The question comes down to whether or not it is more expensive to do this than to continue the use of bonds as a part of the capital structure. From the viewpoint of management it might appear to be a matter of indifference, for the business is a monopoly and the public is expected to bear the costs of rendering service, including the cost of a return upon investment. But the utility is under pressure to reduce the return to capital to as low a percentage as possible and is expected to raise the needed funds as cheaply as possible. If the cost can be materially lowered by the continued use of some bonds, the public is apt to be unwilling to bear the cost of a less economical form of capital structure.

The use of borrowed funds, regardless of their cheapness, will be

" Actually certain amounts may be available from depreciation allowances (as explained on pp. 435-437), which, if not offset by cash outlays for replacements, could logically be used for debt retirement. As long as the utilities are in the growth stage and require additional assets, the point is of only theoretical significance, because to retire small amounts of debt while new flotations were necessary for additions would be inefficient. But after the industry has reached maturity, as in the case of the railroads, the funds available from depreciation might well be tied into a plan of debt retirement.

restricted by the standards of the investment market and by considerations of the long-run safety of the company. On the other hand, the return needed to induce common stockholders to invest further funds will be somewhat less, according to the degree of conservatism in limiting the proportion of debt. Ordinarily this lowering of the rate of return required by stockholders is not sufficiently great to make it economical to abandon the use of debt, except on those rare and unhealthy occasions when the stock market mounts to such heights of optimism as to offer lower yields on common stocks than on bonds.

Government competition. The existence or expectation of government ownership or competition may place obstacles in the way of financing by private utilities I 'ted States -o - • •• • t ownership has been confined largely to the ownership and operation -the water su ' ● turitria'Tify,as suggested earlier in this chapter. In the traction field, some municipalities have been pressed into the field in order to provide funds for much-needed facilities where private corporation credit has become inadequate. The case of New York City has been mentioned as an illustration of this type of situation. Among the electric utilities there are cases where municipal ownership has been a matter of choice, as in Cleveland and Seattle, but very often it has been adopted by small communities at a time when the prospects of profitable operation were such that private enterprise could not be attracted."[1]

The building of a number of important water-power projects by the Federal Government has made the question of competition more important to electric utilities in the areas within the range of these power-generating centers. Two methods may be employed in the marketing of the power developed: It may be sold to existing private and municipal companies, or it may be sold to municipalities that are induced to acquire distribution facilities by purchase from, or construction in competition with, existing private companies.

The first course would avoid problems of government operation. Whatever advantages might flow_from_lo_w-cost generation could 17;Ta-ssUi-edito-tire-conEumin-aublic by suiiabre-65fftracts-by-tho government with the private distributifig_p_ower Company. Where power is transniittell-0.cron-efdreririeTthe compaT13T 7611Td be subject to regulation by the Federal Power Commission as well as by the state commissions. Such arrangements would not injure the private utilities' credit unless rates were set at an unprofitably low level under threats of government competition. Rates might be

[1] E. 0. Malott, *Forces Affecting Municipally Owned Electric Plants in Wisconsin* (Northwestern University, Studies in Public Utility Economics, Research Monograph No. 2, 1930). This writer points out how this origin of a good many municipal electric properties explains why they are in the high-cost group of producers.

injurious to credit even though reasonable if the corporation had capitalized its property at an excessive figure and issued bonds and preferred stocks in excessive amounts, or if the company's operations were inefficiently conducted. On the other hand, unfairly low rates might result from the unwillingn nt representatives toa1Tow reasons re a mormts-i yx-se rates for transmission and other distribution and administrative expenses. Whatever the cause, rates so low as to injure corporate credit may handicap the corporation in raising new funds—a serious matter for an industry still in the growth period.

Much more serious in its possible consequences to the credit of the industry is the second alternative of forcing the private utilit out of business. The Federal Govern ncourage palities to acquire their own plants and to purchase power from the Tennessee Valley Authority. In such a case the municipality might acquire existing private facilities either by negotiation or condemnation. Such a sale of assets might result in substantial losses, which would primarily affect stockholders. Possible reasons for a disadvantageous sale might be (a) low valuation due to a depressed price level, (b) excessive capitalization, or (c) a refusal by the municipality to buy parts of the property, such as the generating plant, which would be useless without distribution facilities, or certain property outside city boundaries, which it might be impossible to operate profitably alone. Aprivate utility might fer to submit to a sale of propertieven ai an unfairly low price than to face the threat-o-f-eorrriiertion. WiTETTarge prop ortiaTf its costs fixed, the loss of any substantial part of its business to a competitor might lead to financial failure, and the property would lose its investment value. Something of the competitive advantage which a municipality might enjoy may be gathered from the fact that municipalities have been offered loans by Federal agencies, such as the Public Works Administration, with as much as 45 per cent an outright gift and the balance at a very low interest cost.

The adoption of the competitive method in such situations is an abandonment of a principle which had come to be accepted widely. As regulation became widespread, commissions refused to grant certificates of convenience that would permit the construction of private duplicating facilities. Under the theory of fair return, such unnecessary and wasteful investment would simply add to the costs to be borne by the consumers. Whether or not municipalities are subject to regulation will depend upon the laws of a given state.[35]

""A survey of the state laws shows that rates [of municipal utilities] are subject to state supervision in only 16 states, service in 14, accounting in 17, and reports in 18." W. E. Mosher and F. G. Crawford, *Public Utility Regulation* (New York: Harper and Bros., 1933), p. 499.

In most jurisdictions they have freedom from the restrictions placed upon private business corporations. Losses from duplication would have to be borne by the investors in private properties replaced by the municipality.

Competitive position of electric utilities. Since the conflict between public and private ownership advocates is likely to continue hot as a result of Federal hydroelectric-power development, the major pros and cons should be kept in mind because of their influence on the financing of privately owned units. The publicly owned utility has three competitive advantages aside from any clear and direct subsidy. The first is in the cost of funds, which, as previously pointed out, is a substantial element in the cost of utility service. The superior credit of a government unit usually permits a lower interest rate than can be obtained by the private corporation, particularly when the cost of owned capital is averaged in for the latter. This low rate of interest is due in part to the tax exemption of public debt but more to the fact that the risk of failure of the utility is assumed by the taxpayer, whereas in the private corporation it rests upon the investor.[1] That the risk is real can be seen from the heavy losses suffered by investors in street railways.

A second advantage which the publicly owned utility may have is freedom from some of the taxes to which the private corporation is subject. These are an important part of the cost of service, for the latter may be reduced from the fact that in recent years from 10 to 15 per cent of private utility gross revenues have been devoted to this item. Any lowering of rates by a municipal utility because it escapes from taxes represents no efficiency upon its part but only a shifting of the tax burden from the consumer of utility service to other taxpayers.

A third possible advantage may lie in the development of power by the Federal Government as a part of a program of flood control, the improvement of navigation, or some other public purpose which a private corporation would not undertake.[2] The development may offer the Government a means of recovering something on the cost of dams and other constructions for the control

[1] Some idea of the extra yield which a municipality would have to pay if it did not use its credit but let the buyer depend upon the earnings of the municipally owned utility can be had by comparing the yield of general credit obligations and those dependent upon the revenues of municipally owned utilities in cities like Seattle. Even in such cases the bond buyer probably has some hope that the city might support these revenue bonds in a pinch. The Federal Government came to the rescue of the unguaranteed Federal Land Bank bonds in 1932. On the other hand, in times past, a number of states have defaulted on guaranteed bonds (that is, bonds upon which they had assumed explicit liability) of banks, railroads, and canals, in a period of depression.

[2] For arguments for and criticisms of this joint purpose idea, see the *Report of the Joint Committee on the Investigation of the Tennessee Valley Authority,* Senate Doc. No. 56, 76th Cong., 1st Sess., April 3, 1939.

of water run-off. Those familiar with the accounting problems in the allocation of expenses among joint cost products will appreciate the complexities of a situation of this type. Some have taken the extreme position that the power should be regarded as wholly incidental and that no attempt should be made to allot reasonable costs to it, as might be done by a disinterested accountant. From the economic point of view it could be argued that the cost of the power can be figured as including only those expenses which are added in order to develop electricity over and above those that would be incurred in any case for the other joint purposes. Such treatment would have to be justified by a showing that the "other purposes" were economically warranted when such a generous portion of the costs was so allocated. However, the "cost" of electricity calculated by such a method could never be regarded as having any validity as a "yardstick" by which to judge the performance of private utilities. The idea of employing a "yardstick" without qualification is certain to lead to errors, because electric utilities operate under different conditions, such as differing labor and fuel costs, so that equally efficient properties may need to charge different rates. Since the cost of water power varies with the volume, the head, the regularity of water flow, and geological and other factors, it can have no bearing as a measure of what the generation of steam power should cost. The remarkable increase in efficiency of steam-power plants in recent years has reduced the economic attractions of water power. The cost of generating steam power has been so reduced that for larger systems it is far from being the major part of the cost in the price paid by the residential consumer.

Herein is the clue to the major advantage which the private power company may have over a municipal plant. Under the spurs of regulation and comparison with other utilities, there is a constant pressure toward lower costs. Skillful operating methods may offset the advantages which the public unit may have. The greater ability to obtain and hold skilled administrative personnel and to make innovations more easily to meet changing conditions are valuable advantages.

Whatever the solution of the problem of private versus public ownership and operation, the major factors should be understood, because, as long as the conflict remains, it will remain a major factor affecting the financing of the utilities involved. In fact, the force of sentiment is so strong in the investment market that even the stock financing of companies outside the territory of Government power projects is likely to be adversely affected.

CHAPTER 13

RAILROAD FINANCE

Financial Characteristics

Financial significance of the railroad industry. For many years the railroads have provided the richest field of study in corporation finance, partly because they pioneered in large-scale corporate financing and developed such a variety of devices and partly because their problem of attracting such a volume of funds during the decades of their rapid growth gave them a wide public interest. By 1860 railroads occupied the leading place in the corporate lists, and today the industry holds a place second only to that of agriculture in total property investment.

The current importance of the railroad industry is apparent from a few asset and capitalization figures. The total property investment of the Class I railroads in the United States (those having gross revenues of $1,000,000 or more), taken at balance sheet value, amounted to 22.6 billion dollars after depreciation at the end of 1937. Against this investment, securities with a par amounting to 18.3 billion dollars are outstanding in the hands of the public. Almost half of the funded debt included in this total is owned by banks and insurance companies, so that indirectly millions of depositors and policyholders have a stake in the industry.[1] As for the stock, at the end of 1937, Class I railways had 872,000 stockholders of record.[2] In addition to these, the million employees of the industry, the millions of users of its service, and the industries providing its materials and equipment constitute a vast group vitally concerned with the financial record of the railroads.

The actual problems of present-day railroad financing are the concern of a limited number of individuals, owing to the concentration of control of the bulk of railroad property in a relatively small number of companies and to the slow growth of the railway network since 1900. Some idea of the importance of the major companies may be obtained from the distribution of mileage owned and oper-

[1] U. S. Dept. of Commerce, Bureau of Foreign and Domestic Commerce, *Long Term Debts in the United States* (Washington, 1937), p. 52.

[2] Interstate Commerce Commission, *Statistics of Railways in the United States,* 1937, p. S-48. This figure includes duplications arising out of the ownership of stock of more than one company by the same individuals.

ated among the various classes of railroads, which was, at the end of 1937, as shown in Table 19.[3]

TABLE 19

MILEAGE OWNED AND OPERATED BY THE VARIOUS CLASSES OF RAILROADS, 1937

		Mileage Owned		Mileage Operated	
Class	*No. of Companies*	*No. of Miles*	*% of Total*	*No. of Miles*	*% of Total*
Class I	136	177,669	74.5	235,168	93.4
Class II*	193	10,047	4.2	11,475	4.5
Class 'III	239	3,620	1.5	3,939	1.6
Unclassifiedt	621	47,203	19.8	1,247	.5
	1,189	238,539	100.0	251,829§	100.0

* Includes carriers with operating revenues between $100,000 and $1,000,000.
t Includes carriers with operating revenues of less than $100,000.
$ Includes lessor, proprietary, and unofficial companies (nonofficial terminology).
§ Includes duplications resulting from reporting of trackage rights.

Most of the different companies are actually included in a limited number of controlled "systems."[4] There is, therefore, marked concentration of control in the industry, involving a concentration of financial decisions. Decisions with respect to financing at the present time are largely confined to those concerning the financing of equipment, betterments, and replacements and the refunding of existing securities, rather than raising funds for mileage growth. The peak in railway mileage (254,037 miles) was reached in 1916.

Complexity of railroad finance. For a number of reasons, railroad financing is more complex than industrial and utility financing. The variety of securities and their differing characteristics may be attributed to (1) the piecemeal construction of railway systems by many separate companies which were later put together by means of various combination devices, including mergers, consolidations, lease of property, and the holding company; (2) the use of the construction company device, which required the piecemeal pledging of properties; (3) the insistence on the part of foreign capitalists upon mortgage security; (4) the failure to utilize the open-end mortgage to anything like the extent of its later use by utilities, resulting in a succession of mortgage liens; (5) the use of

Ibid., p. S-3. Track mileage operated including second, third, and fourth main tracks, yard track, sidings, industrial track, and so forth, exclusive of switching and terminal companies, totaled 415,819 miles (including 2,346 miles in Canada).

"Systems" are tied together by direct ownership of stock, by the holding company and lease devices, and by common control by individuals. In 1930, 14 systems included 86 per cent of total operated first track mileage. *Regulation of Stock Ownership in Railroads,* House Report No. 2789, 71st Cong., 3rd Sess. (1931).

special types of securities, such as the equipment trust certificate to finance the acquisition of rolling stock, and the income bond to effect the reorganizations through which nearly all the major companies have passed; (6) the relatively late development of effective regulation of railroad finance. The first point undoubtedly offers the chief explanation. As Bogen points out:

> Such roads as the Pennsylvania, the New York Central, or the Southern Railway include hundreds of individual corporations, many of which retain their peculiar capital structures. In the course of time, some simplification was introduced in intercorporate relations and security issues, but there still remains an infinite complexity of divisional liens and subsidiary stock issues which it will take many decades to eliminate through the normal course of redemption and refunding operations.[1]

The influence of these factors will be discussed in the following pages.

The railroad balance sheet. Before examining the variety of securities used, a combined balance sheet of Class I railroads will show something of their importance and the type of assets upon which they rest.

COMBINED BALANCE SHEET, CLASS I STEAM RAILROADS[2]
(EXCLUDING SWITCHING AND TERMINAL COMPANIES)
DECEMBER 31, 1937
(in millions)

Assets		
Investment:		
Investment in road and equipment	$19,592	
Improvements on leased property	567	
Investment in affiliated companies	3,782	
Investment in nonaffiliated companies	1,911	
Miscellaneous physical property and sinking funds	24	$25,876
Current Assets:		
Cash and deposits	$ 485	
Receivables	245	
Materials and supplies	385	
Other	29	1,144
Deferred Assets		274
Unadjusted Debits		203
Total Assets		$27,497

[1] Jules I. Bogen, *Analysis of Railroad Securities* (New York: Ronald Press Co., 1928), p. 348.

[2] Interstate Commerce Commission, *op. cit.*, pp. S-107, 108. The items have been somewhat condensed in the above statement. The statement includes intercompany duplications.

Liabilities and Net Worth

Capital Stock Outstanding:		
Common	$6,256	
Preferred	1,867	$ 8,123
Long-term debt		10,687
Premium on capital stock		48
Grants in aid of construction		29
Capital liability adjustments		9
Current liabilities:		
Payables	$ 609	
Dividends payable, interest, and principal matured	1,305	
Other	24	1,938
Deferred liabilities		308
Unadjusted credits:		
Tax liability	$ 202	
Insurance and casualty reserves	47	
Accrued depreciation	2,637	
Other	343	3,229
Appropriated surplus		1,178
Profit and loss balance		1,948
Total Liabilities and Net Worth		$27,497

From this statement it may be seen that railroad assets are almost entirely fixed and consist chiefly of specialized transportation property and of railroad securities. This fixed nature of the investment explains the use of long-term debt and proprietorship obligations as the main sources of funds and the unimportance of current financing. Current assets play but a minor role. The business of the railways is largely on a cash basis, and so receivables are negligible. They sell a service, and so have no inventories in the ordinary sense. The "plant turnover" of the railroad industry is slow. In normal years, there has been a ratio of a dollar of gross operating revenues for approximately three dollars of investment; in a poor year like 1932, the ratio was as low as one to six. The heavy investment in fixed assets, which because of their specialized nature cannot be turned to other uses, leads to the advantage of increasing returns in a period of rising traffic, but, when traffic declines, as it did during the period 1930-1933, serious complications arise.

The statement also reveals that the capital structure includes a moderately higher percentage of funded debt than the utility group and a much higher percentage than the industrial group.[1] The

[1] See pp. 237 and 260.

capital structure proportions in the above statement are as follows: [8]

Long-term debt	48.7%
Preferred stock	8.5
Common stock	28.5
Surplus	14.3
	100.0%

Bond Financing

Types of bonds used. The funded debt of the Class I railroads (1937) consists of the following subclassifications:

	(in millions)
Mortgage bonds	$ 7,729
Collateral trust bonds	757
Equipment obligations	550
Income bonds	290
Miscellaneous	824
	$10,150

The mortgage bonds consist of a great variety of liens, but they may be divided roughly into two broad classes: (1) the underlying divisional mortgage liens, mostly small first mortgages created when these divisions were independent and assumed through consolidation or lease;. and (2) the blanket or general mortgage liens created subject to the first class but often having a first claim on important sections of mileage. The collateral trust bonds, generally secured by holdings in affiliated railroads, were the natural outgrowth of system-building activities after 1897. [10] Equipment obligations are all, or virtually all, trust certificates issued under the lease plan. [11] They shrink in importance as a result of serial maturities during periods when the railroads are making few additions to their rolling stock. Railroad income bonds, originating in reorganizations, are often secured by a general junior mortgage. An increase in the total of these bonds is expected as a result of the numerous reorganizations now pending. The miscellaneous bonds are chiefly debentures, which, because they follow heavily mortgaged properties, are often made convertible to provide speculative appea1. [12]

8 The "net" capitalization of railroads of *all classes,* after the elimination of intercompany holdings, consisted of $11,250,000,000 of funded debt and $7,069,-000,000 of stock at the end of 1937. The assumption of rental liability under long-term leases also has the effect of increasing the burden of fixed charges over what the combined capital structure figures would indicate.

[8] Interstate Commerce Commission, *op. cit.,* p. S-46. The total differs from that of total "long-term" debt in the preceding balance sheet in that it does not include receiver's certificates and nonnegotiable debt to affiliated companies. The latter are regarded as "long-term" but not "funded" debt.

[10] See pp. 141-153 for a discussion of collateral trust bonds.

[11] See pp. 153-159 for a discussion of equipment obligations.

10 See pp. 169-171 for a discussion of convertible bonds.

In addition to the obligations of operating companies, there is included in the above group a considerable volume of securities of leased lines. The operating company not only takes over all the problems of operation but also generally pays a rental that guarantees the interest on the bonds of the lessor corporation and a fixed dividend on the latter's stock. [13] Many companies have also issued short-term notes running usually three to five years to maturity, offering them when market conditions were not favorable to the sale of long-term securities.I [4]

The complexity of railroad financing may be illustrated by reference to almost any of the major railway systems and their capital structures. Not every large company has all the types of securities noted above. However, one would expect to find nearly all these types in the major companies, with debenture and income bonds occurring least frequently. In addition to their own direct obligations, most of the larger companies have incurred indirect obligations through the guarantee of securities of other companies, either by a direct endorsement or as a feature of a lease contract.

Capital structure of the Atlantic Coast Line. To illustrate these various forms of finance more concretely let us examine the capital structure of the Atlantic Coast Line Railroad Company, a carrier serving the southeast coast area from Washington to Florida and west to Atlanta, Georgia, and Birmingham, Alabama. While the security issues of this company are not so numerous and varied as those of some of the Eastern "trunk" lines, they include all of the types outlined above, with the exception of income bonds, and are fairly typical of railroad finance generally. The Atlantic Coast Line Railroad Company of today is the result of the combination of more than one hundred railroads. The Richmond and Petersburg, 26 miles long, chartered in 1836, was the parent company. In 1898 it acquired the Petersburg Railroad and became the Atlantic Coast Line Railroad Company of Virginia. This company in turn, in 1900, acquired a system of greater mileage than itself, the Atlantic Coast Line Railroad Company of South Carolina, the Wilmington and Weldon Railroad Company, the Southeastern of North Carolina, and the Norfolk and Carolina, and changed its name to the Atlantic Coast Line Railroad Company. In 1902 the company acquired the Savannah, Florida and Western, itself a consolidation of a number of small roads, and the majority of the stock of the Louisville and Nashville.' [5]

See Chapter 23 for a detailed discussion of the lease method of combination.

" W. Z. Ripley, *Railroads: Finance and Organization* (New York: Longmans, Green and Co., 1915), pp. 164-173, provides an excellent account of the earlier use of short-term loans.

" H. D. Dozier, *A History of the Atlantic Coast Line Railroad* (Boston: Houghton Mifflin Co., 1920), pp. 2, 3.

At the end of 1937, the Atlantic Coast Line's capital structure, by major types, was as shown in Table 20.

TABLE 20

CAPITAL STRUCTURE OF THE ATLANTIC COAST LINE
(dollars in millions)

	Amount	*Per Cent*
Funded debt:		
Underlying divisional bonds	$ 9.6	2.9
General mortgages, A. C. L.	85.2	26.3
Collateral trust bonds	47.0	14.5
Convertible debentures	4.4	1.3
Equipment trust certificates	4.6	1.4
	$150.8	46.4
Capital stock:		
Common stock	$ 81.31	
Class A stock, Richmond and Petersburg R. R. Co.	1.0	25.4
Preferred stock	.2	.1
	$ 82.5	25.5
Surplus:		
Premium on capital stock	$ 4.8	1.5
Appropriated	5.8	1.8
Profit and loss	80.5	24.8
	$ 91.1	28.1
Total	$324.4	100.0

1. "Underlying" divisional liens. The divisional liens of Atlantic Coast Line afford typical examples of underlying bonds on main sections of line pieced together in the evolution of the present system. At the end of 1937 they included such issues as the Brunswick and Western Railroad Co. (which was a part of the former Savannah, Florida and Western) 1st 4's of 1938, the Norfolk and Carolina Railroad Company 1st 5's of 1939, the Richmond and Petersburg Railroad Company consolidated 42's of 1940 (the original parent line), the Florida Southern Railroad Company 1st 4's of 1945, the Norfolk and Carolina Railroad Company 2nd 5's of 1946, and the Atlantic Coast Line Railroad Company of South Carolina general 1st 4's of 1948. These issues enjoy first mortgages on parts of the main line and branches of the present system. The amount of line built and acquired by the present company since the acquisition of control of the Louisville and Nashville in 1902 is of relatively small importance, and there are no underlying divisional liens on main-line or branch-line mileage constructed by the present corporation.

2. Junior "overlying" liens. Junior, or "overlying," liens usually constitute the largest bond issues of the major railroads. They are secured by a junior claim to property already mortgaged for the divisional bonds, and in addition by a first lien on newer extensions. When securities are also pledged as collateral, these bonds are sometimes called "first and collateral." Other common names for these junior overlying liens are "first and general," "first and refunding," "first and consolidated," "first consolidated," "first general," and "general." The terms "second mortgage" and "third mortgage" are used infrequently.

The Atlantic Coast Line has two junior overlying issues, which constitute over half of the total debt. The larger of these, the first consolidated 4's of 1952 ($50,900,000 outstanding) is a closed mortgage issue secured by a first lien on 2,760 miles of road, a second lien on 1,057 miles, and a third lien on 109 miles. The general unified 4's and 41's of 1964 ($34,300,000 outstanding) are secured by (1) a second lien on the 2,760 miles upon which the first consolidated 4's are a first mortgage, (2) a third lien on the main-line mileage, much of which secures the divisional liens, (3) a first lien on 616 miles of miscellaneous branch lines, and (4) a fourth lien on 109 miles. As underlying liens are retired, the junior bonds "move closer to the rails." Thus, at the end of 1934, the first consolidated 4's had a first lien on only 1,471 miles of road, but, by reason of the retirement of several divisional issues, the big issue had become a first lien on 2,760 miles of road at the end of 1937. The prospect is for the further retirement of the smaller divisional bond issues. The total of the latter has already been so reduced and the amount of first lien securing the first consolidated 4's has become so substantial that it would rate as substantially a first mortgage issue.

3. Collateral trust bonds. Collateral trust bonds, as noted above, have been a convenient device by which railroad companies have financed the acquisition of subsidiaries. In 1902 a $35,000,000 4 per cent collateral trust issue was given by the Atlantic Coast Line as part of the purchase price for Louisville and Nashville stock.[16] The stock so acquired, 51 per cent of the total outstanding, was pledged to secure these bonds. The other collateral trust issue, the $12,000,000 ten-year "note" issue sold in 1935, was offered for the purpose of refunding maturing divisional bonds. This issue is secured by $25,000,000 Atlantic Coast Line general unified 42's pledged as collateral. The low market price of outstanding unified 41's (79-841 in April, 1935) when the new financing was necessary accounts for the sale of collateral trust bonds instead of the direct sale of the pledged securities.

4. Debenture bonds. The convertible feature is sometimes at-

[16] *Ibid.,* p. 150.

tached to debenture bonds to improve their salability.[17] In 1909 the Atlantic Coast Line issued $23,000,000 of convertible 4's due in 1939 to retire an equal amount of certificates of indebtedness. The conversion feature expired in 1920, by which time $18,600,000 had been converted into common stock, leaving the present balance of $4,400,000 outstanding. The use of unsecured debenture bonds by railroad companies is not as common as in the case of industrials. The best, if not all, of the railroad's property is ordinarily pledged. Debentures are used when existing liens contain closed mortgages or when open-end mortgages have restrictions that prevent further issues at the time and any junior lien that could be given would have little value in the eyes of the investment market." By attaching the convertible feature, the bonds may be made more attractive."

5. Equipment trust certificates. The use of equipment trust certificates has already been discussed in Chapter 7. In 1930 the Atlantic Coast Line had $6,500,000 outstanding. By serial maturities this amount was reduced to $1,670,000 at the end of 1936. A new issue raised the total to $4,639,000 at the end of 1937. In addition to the dividend payments, management must keep in mind the annual burden of certificate maturities.

6. Lease and guarantee obligations. As has been suggested above, large railroad companies are often obligated under lease and guarantee arrangements in addition to their own direct obligations. A lease of another railroad's property usually involves the assumption of a fixed, rental charge, which would pay the interest and dividends on the securities of the lessor road. These bonds and stocks become the fixed obligation of the lessee road but do not appear in its balance sheet. The operating revenues and expenses become a part of the operating section of the income account, however, and the rentals appear among the fixed charges in the same section of the statement as that which shows the interest on debt. A lease, by creating a fixed obligation to pay rent for a long term, would make the securities of the lessor road guaranteed in effect by the lessee road with respect to income, but quite generally the lease

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" As in the case of the New York Central Railroad Co. secured convertible 6's of 1944, which were sold in 1934 and most of which were converted before their redemption in 1937.

" Dewing suggests that "railroads have resorted to debenture bonds during periods of what might be called 'waiting-time' financing, when it is inexpedient to sell long-term mortgage bonds because of previously existing mortgages and temporarily poor credit, but when the market can absorb an obligation of longer maturity than the so-called short-term notes." A. S. Dewing, *Corporation Securities* (New York: Ronald Press Co., 1934), p. 308.

" On April 1, 1937, the Pennsylvania Railroad Company issued $52,670,000 of convertible debenture 31's due 1952 to provide funds for the extension of electrification and other improvements and for the payment of maturing obligations.

contract specifically states that the securities shall be guaranteed in name also, thereby adding the guarantee of principal for the bonds.

At the end of 1937, the leases of the Atlantic Coast Line involved direct interest payments on the bonds of nine companies whose facilities it used jointly, and payments to eight others under straight lease contracts which totaled only $88,293 in 1937, or 1.3 per cent of its total fixed charges.[20] The company was also jointly liable for the principal and interest on bond issues of seven companies, of which three were terminal companies in which the interest expense was shared by other roads. It has also guaranteed the 5 per cent dividend on the preferred stock of the Atlanta, Birmingham and Coast Railroad Company.

Problems of complex debt structures. The capitalizations of railroad companies are not all equally complicated. As an example of a relatively simple capital structure, the Chicago Great Western Railroad. Company, at the end of 1938, had only two bond issues outstanding, in addition to its equipment obligations and Reconstruction Finance Corporation loans. At the other extreme stand the Eastern trunk lines, whose mileage includes property owned at one time or another by hundreds of separate companies. Examples of very complicated financial structures are to be found in the Pennsylvania Railroad Company, with 26 issues and series of direct obligations (not including equipment obligations) , the New York Central Railroad Company with 25, and the New York, New Haven and Hartford Railroad Company with 28. These figures do not include guaranteed issues not appearing on the balance sheet.

As a result of the complexity of the funded debt structure of the large railway company, certain problems arise both for the investor and for the railway management. As Ripley has pointed out, railway mortgage indebtedness is a matter not of corporate unity, but of "particularity to the last degree."[21] Separate properties are separately mortgaged, and the status of different bond issues is often obscure until reorganization takes place. The threat of foreclosure and acquisition of the mortgaged property is seldom carried out, because of the specialized nature of the property. The separate units usually cannot be operated to the greatest advantage except as parts of a unified going concern. The main purpose which the right of foreclosure serves is to give the holders of a specific lien

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[20] For a few companies, rentals are almost as significant as interest charges. Thus, the Pennsylvania Railroad Company's net rent for leased roads amounted to $21,000,000 in 1937 as compared to its interest on funded and unfunded debt of $28,000,000. Moody's *Manual of Investments, Railroads,* 1938, p. 751. (Gross rents for leased lines totaled $51,000,000, but this amount was offset by $30,000,000 income from stocks and bonds of these leased lines owned by Pennsylvania and included in its "Other Income.")

[21] Ripley, *op. cit.,* p. 122.

bargaining power in any reorganization in proportion to the profitableness and importance of the property pledged to them. The representatives of the various bond issues work out a compromise plan of reorganization which reflects the relative strength of the various issues. The existence of many liens is an important factor in causing prolonged and expensive reorganizations.[22]

To the management of the companies, the piecemeal debt arrangement raises the problem of working out the best available combination of liens on real property, collateral trust issues, and debentures, in order to keep total interest cost at a minimum. Once begun, the policy of numerous issues may be continued either because certain existing issues are noncallable or because refunding would increase the burden of interest charges.

While there is a tendency toward simplification of railway funded debt structures through the gradual maturity of bonds, through the use of consolidating, refunding, and convertible issues, and as a result of periodic reorganizations, progress in this direction is slow indeed. Rail bond maturities, as a rule, are long, and seldom has any definite provision been made for retirement at maturity. The stronger roads have, however, been eliminating minor issues by outright payment at maturity in recent years, thereby moving in the direction of simplicity with some small debt reduction.

Preferred Stock

Preferred stock makes up about 10 per cent of the total capitalization of the railroads of the United States. The proportion varies greatly among individual companies. Many, like the New York Central, have no preferred at all; other roads have used it to a considerable degree. For example, the Gulf, Mobile and Northern preferred constitutes 30 per cent of its total capitalization.[23] The Atlantic Coast Line's percentage of preferred stock to total capitalization is negligible. All but $196,000 of the original issue of $18,850,000 has been exchanged for 4 per cent certificates of indebtedness.

Railroads use both cumulative and noncumulative preferred stocks. The latter originated, with a few notable exceptions, in railway reorganizations, replacing previous bond issues and relieving the companies concerned of the burden of interest and the possi-

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See Chapter 28 for a more complete discussion of this situation.

" The Great Northern Railway Company presents a unique situation in that it has only $6 noncumulative preferred stock outstanding. "No common stock has ever been issued. This peculiarity is due to a charter right dating from 1865, which authorized the issue without limitation of such classes of preferred shares as it deemed proper. Under this charter the company claims exemption from state supervision of all capital issues of a preferred sort, and carefully refrains from any emission of common stock at all." Ripley, *op. cit.,* p. 97.

bility of accumulated preferred dividends.[24] Of the 144 Class I steam railways in 1937, 55 had 77 issues of preferred stock outstanding, of which 42, or 55 per cent, were noncumulative, and 35, or 45 per cent, were cumulative.[25] The cumulative preferred stocks are mostly of fairly recent origin. Some were issued as a result of financial reorganization; others were issued to raise cash. The advantages of financing with preferred stocks, as stated previously, are that they avoid the fixed charges of bonds and increase net worth, and that they can be sold when common stock is inconvenient because a higher return would have to be offered or is impractical because market price is below par.[26]

Common Stock

No extensive description of the use of common stock by railroad companies is necessary here. Owing to the emphasis on senior securities, common stock usually represents a smaller percentage of capitalization than in the case of industrial corporations. A small proportion of common permits concentration of control and affords the advantage of trading upon equity. The control factor no longer has the importance in these times of diffused ownership that it possessed years ago when the roads were in their growth stage. The merits of, trading on equity for the regulated public service corporation have already been commented on in connection with the utilities. In normal years the rates of return earned on total investment, which are relatively low as compared with unregulated industry, may, through the use of large senior issues bearing low interest rates, result in a respectable rate of return on the common and permit substantial dividends to be paid by the stronger companies. Adequate earnings and dividends are necessary if common stock is to be salable for financing purposes and if the capital structure is to be kept in suitable balance between debt

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The preferred of Chicago & Northwestern (issued in 1864), the Atchison (1900), the Southern Railway (1897), and the Illinois Central (1922) are leading examples of noncumulative issues which were offered for new capital purposes. Examples of noncumulative issues arising out of financial reorganization include the Erie (1895), Reading (1896), Union Pacific (1897), Baltimore and Ohio (1898), and Chicago, Milwaukee, St. Paul and Pacific (1926).

" Prominent carriers having no preferred stock outstanding include the Central of New Jersey, the Chicago, Burlington and Quincy, the Delaware, Lackawanna and Western, the Louisville and Nashville, the New York Central, the Northern Pacific, the Pennsylvania, and the Southern Pacific.

The cumulative preferreds of the Rock Island (1917), the Missouri Pacific (1917), and the Chicago Great Western (1911) were issued under the terms of reorganization. Prominent examples of carriers issuing preferred stocks to acquire funds "in the ordinary course of business" include the Chesapeake and Ohio, which issued its preferred stock in 1922 in order to acquire new properties, and the New Haven, which sold convertible preferred stock for cash in 1927 in order to help reduce its indebtedness to the Federal Government which was incurred during the war period of Federal control.

and stock. The data shown in Table 21 indicate both the favorable and the unfavorable sides of this situation for the Northern Pacific Railway. During the years 1928-1930, the return on total capitalization was magnified to a larger rate on the capital stock because the average rate paid on funded debt (including equipment obligations) , which constituted 56 per cent of the capitalization, was only 4.6 per cent. During the depression years, of course, trading on, the equity resulted in a substantial shrinkage of earnings available to the stock. (The percentages do not show the return on total investment, because of the omission of surplus.)

TABLE 21

NORTHERN PACIFIC RAILWAY-CAPITALIZATION AND EARNINGS

(dollars in millions)

Year	*Total Capitalization*	*Total Net Earnings*	*Rate Earned on Total Capitalization*	*Capital Stock*	*Net for Stock*	*Rate Earned on Stock*
1928	$565	$35.8	6.3%	$248	$21.1	8.5%
1930	562	31.7	5.6	248	17.2	7.0
1932	557	12.3	2.2	248	2.0d	(d)
1934	558	15.1	2.7	248	0.9	0.4
1936	560	16.1	2.9	248	1.8	0.8
1938	565	10.3	1.8	248	4.3d	(d)

d = deficit

Common stock comprised 33 per cent of the gross capitalization and 28.5 per cent of the total capital structure of the industry at the end of 1937. When surplus is added, total common equity becomes 43 per cent of total capital structure. [27] In comparison, the Atlantic Coast Line had stock, practically all common, representing 35 per cent of capitalization and 25.5 per cent of capital structure; common stock and surplus represented 53.6 per cent of capital structure. There are two types of common stock outstanding—that of the Atlantic Coast Line Railroad Company itself and the Class A stock of the Richmond and Petersburg Railroad Company. The

" Certain carriers have relied upon common stock to an unusual degree. For example, the Delaware, Lackawanna and Western has only $4,500,000 of funded debt outstanding, as compared to its $84,000,000 of capital stock (all common). The comparative absence of interest charges, however, is offset by the very heavy rentals for which the company is committed. The Norfolk and Western, whose common stock represents 65 per cent of total capitalization, is perhaps the most conservatively capitalized of the leading carriers. In contrast to the increases in funded debt made by most railroad companies during the past 20 years, this road has gradually reduced its funded debt from $120,000,000 in 1926 to $52,000,000 at the end of 1935. The reduction has been effected through the use of convertible bonds and by the retirement of large blocks of bonds out of treasury funds.

latter, which was retained in the subsequent consolidations, is part of the original capitalization of the parent company and is equivalent to the common stock of the Atlantic Coast Line in every respect.

Review of Railroad Financing

Railway financing to 1865. The review of the Atlantic Coast Line's capital structure indicates how largely it must be explained in terms of that company's development. Because this point holds for the railroads as a whole and because no material in our field has a wider public interest, a brief recital of American railroad financial history is appropriate.

The earliest railroads in the United States were financed almost entirely by the sale of capital stock. It was the accepted method of financing in New England, and even the first Middle Western and Southern roads were promoted largely with share capita1.[23]

This emphasis upon stock in a new and uncertain promotional field was decidedly logical. However, the disadvantages of this conservative course resulted in the development and growth of borrowing. Reasons advanced, for the change are as follows: (1) The necessary amount of capital for construction of other than local enterprises could be attracted only by appealing to Eastern and foreign sources, and bonds for security (often with a stock bonus for speculation) became a necessary method of financing;" (2) the possibilities of trading on equity began to be recognized; (3) the use of bonds plus stock provided immediate compensation and profits to the promoters —the bonds could be more readily sold for cash and the stock could be retained for control; (4) the final cost of construction usually exceeded the original estimates, and bonds had to be issued for supplementary construction financing and for unforeseen working capital needs; (5) imperfect construction often had to be brought up to a higher standard, requiring additional capital; (6) the disappointing earnings results of many of the earlier roads led to a distrust of railway shares; (7) as a result of the policy of public subsidies, mortgage bonds of the railways themselves, "land grant" bonds, and public subsidy bonds were readily accepted as having the safety of government bonds themselves.[30] In connection with points (4) and

" "The first Federal Act authorizing construction of the Northern Pacific in 1864 actually prohibited bond issues, a restriction which had to be removed five years later." Ripley, *op. cit.,* p. 11.

[29] "The use of bonds as a means of providing for original capitalization almost invariably indicated the presence of outside capital." F. A. Cleveland and F. W. Powell, *Railroad Finance* (New York: D. Appleton-Century Co., 1912), p. 53.

[30] "Borrowing for purposes of construction first attained marked prominence between 1855 and the close of the Civil War. Speculation was rampant. The railway net was being rapidly extended, almost without regard to economy of construction. And, most important of all, state aid was being widely granted, either through subscription to bonds, official guarantee of interest or exchange

(5), it should be noted that, where the initial capital is insufficient, it is always difficult to raise more by selling stock, and the extra security of a bond may offer a possible solution.

Governmental participation in railway financing and public aid in general should not be overlooked in a discussion of this early period.[31] The earlier roads enjoyed local aid in the form of bond endorsements, exchange of salable municipal bonds for railroad bonds and shares, and outright donations of cash, bonds, and land. States subscribed to railroad stock, lent and donated cash raised from the sale of state bonds, and granted land. Federal aid was chiefly in the form of land grants, at first made through the medium of the states and later directly. Altogether there were 79 "land grant" railroads, and the original grants totaled over 150,000,000 acres. It should be remembered, however, that much of this land was worthless until the railroads were built through it, that the railroads sold much of their gift land for nominal amounts to attract settlers and build future traffic, and that the land retained by the Government was enhanced in value. Congress also granted direct financial aid by lending $64,600,000 to six railroads to encourage the construction of a through line to the Pacific, securing the loan by a lien on the railroad property.[32]

During the early period, railroad consolidation had made considerable progress. For example, by 1853 ten short lines between Buffalo and the Hudson River were consolidated to form the New York Central. The progress of early consolidations was hindered by the policy of limiting a railroad's activities to the state in which it had received its charter. There was constant difficulty in the interchange of traffic among connecting lines. The process of consolidation, however, went on apace, leaving in its wake increasingly complicated funded debt structures for the growing systems.[33]

The era of the construction company: 1865-1900. No account of the evolution of railway finance would be complete without a brief mention of the part played by the construction company.[34] The construction company was primarily a financial rather than an en-

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of state and municipal bonds for railway bonds. Prior to 1870 the state of Massachusetts alone had loaned $11,290,000 in these ways. New York had taken $8,200,000 likewise in bonds. Southern states like Tennessee had substituted bonds for stock subscriptions, as a stimulus to new enterprises." Ripley, *op. cit.,* pp. 105-106.

31 A most convenient and complete source on public aid and subsidy is F. A. Cleveland and F. W. Powell, *Railroad Promotion and Capitalization* (New York: Longmans, Green & Co., 1909), Chapters XII-XV.

"Cleveland and Powell, *Railroad Finance,* p. 33.

" See A. S. Dewing, *Financial Policy of Corporations* (New York: Ronald Press Co., 3rd rev. ed., 1934), Book V, Chapter 4, for a more detailed but condensed account of the various periods of railroad expansion and consolidation.

" The role of the construction company in railroad finance is adequately described in Ripley, *op. cit.,* Chapter I, and in Cleveland and Powell, *Railroad Finance,* Chapter IV.

gineering concern, since the actual construction was let out under contracts. The device permitted the promoters to evade the law requiring securities to be issued only to the amount of funds or properties acquired, and to obtain more capital than could be had through the direct sale of securities to the public.

The construction company was formed with a cash fund supplied by stock purchased by the promoters. This company entered into an agreement with the railroad whereby it was to receive a stated amount of bonds and stocks of the railroad upon the completion of each section of the stretch of road.[35] It started construction with its own cash resources. When a section had been completed, it could be exchanged for securities, with which cash was replenished. Money could be obtained by either selling the securities or borrowing on them. After the road was completed, the securities held could be sold and any loans could be cleaned up. The company was left with a cash profit consisting of the excess of the proceeds from the sale of the bonds over and above the cost of construction and any stock remaining after bonuses had been given to aid the sale of the bonds. The remaining stock was generally distributed to the owners of the construction company, who were the promoters of the road, and the company was dissolved.

The consensus of students of railway history appears to be that the use of the device led to the building of unnecessary mileage for the sake of promoters' profits, to the necessity of reconstruction of much of the road, to overcapitalization resulting from padded construction accounts, and to the failure of subsequent earnings to support a top-heavy capitalization. The severity of the financial panics which followed the decades of rapid railroad construction was undoubtedly magnified by the premature and wasteful building and the excessive debt arising from the use of the construction company.

During the Civil War, the flow of funds into railroad construction was impeded by the financial needs of the Government. After the war, railroad financing continued largely in the form of bonds, for European capitalists required mortgage security. The use of the construction company also required emphasis on senior securities. Roads like the Union Pacific, Northern Pacific, and Erie were financed mainly by bond issues; of course, there were exceptions, such as the Great Northern and New York Central, which relied particularly on stock. The accumulation of funded debt by the industry, however, went on "until the chapter was ingloriously closed by the panic of 1873, when nearly 500 million dollars of bonds, railroad and other, defaulted in interest."[36]

For a description of different types of construction contracts, see Cleveland and Powell, *Railroad Finance,* pp. 62-71.

" Ripley, op. cit., p. 107.

After the reorganizations which followed the panic of 1873, railway financiers continued to place chief reliance upon bonds for construction money. By 1890, for the roads of the country as a whole, bonds and stock stood about equal. (However, with the construction company device the stock did not necessarily represent cash investment.) The corporate laws of many of the states prevented the proportion of bonds from becoming any greater, but they were used whenever possible. A contributing factor was the prohibition in most states of the sale of stock at a discount. Companies whose stock sold below par on the market had to resort to borrowing. The payment of dividends in bonds and the "watering" of stock through unearned stock dividends also contributed to an unwieldy capitalization.

Complaints of the public against railroad overcapitalization and stock watering finally led to governmental investigation. The Windom Committee, reporting to Congress in 1874,[37] cited the financial abuses as being particularly aggravating, as did the Cullom Committee, whose report in 1886 laid the basis for the Interstate Commerce Act of the following year." The Cullom Committee, however, did not favor Federal regulation of railroad finance. Some of the states, notably Massachusetts and New York, had already passed laws regulating railway financing. In 1852 the former had set up a railroad commission, which in 1871 was given authority over security issues. Thereafter all stock had to be sold at public auction and at not less than par. In 1894 the anti-stock-watering law required stock to be sold at values determined by the commission." Texas passed a stock and bond act in 1893 requiring security issues to be approved and registered by the railroad commission and prohibiting the issuance of new securities until previous overcapitalization, as measured by cost, had been eliminated. Other states enacted similar legislation in the 1890's.

Most of these regulatory measures came too late, or were not stringent enough, to prevent the excessive bond issues which helped to bring about the wave of bankruptcies and reorganizations which followed the four years of depression in 1893-1897. One sixth of the mileage and one quarter of the total capitalization of the carriers fell into the hands of receivers, because of inability to meet fixed charges out of current earnings. Fifty-seven companies were reorganized. Fixed charges were reduced by $19,000,000, usually through the use of income bonds and the exchange of preferred stock for bonds. By

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" *Transportation Routes to the Seaboard,* Senate Report No. 307, 43rd Cong., 1st Sess., Part I (1874).

" *Report of the Senate Select Committee on Interstate Commerce,* Senate Report No. 46, 49th Cong., 1st Sess. (1886).

In 1913 the old Massachusetts railway board was reorganized to form the present public service commission.

1897, for the first time in many years, the amount of stock outstanding exceeded that of the entire funded debt. [40]

During this period Eastern trunk-line development and consolidation had kept pace with the great expansion of mileage westward and contributed greatly to the growth of a complicated railroad capital structure. By lease, merger, new construction, purchase of controlling shares, and "communities of interest," the trunk-line systems expanded their mileage from the East to Chicago and St. Louis in an effort to facilitate service and eliminate competition. This was the era of the railway barons, when Morgan, Hill, Harriman, Vanderbilt, and Gould dominated the railroad scene. The collateral trust bond device was employed to such an extent around the end of the century that it came to be regarded as one of the indispensable instruments of railroad consolidation, [41] for it aided the growth of large railway systems without large cash outlays. The holding company device, dating from 1870 with the chartering of the Pennsylvania Company, was experimented with to a considerable extent before 1900. The Southern Pacific Company, the Great Northern (a pure operating company after 1907) , the Southern Railway Securities Co., and the Reading Company were prominent examples of the earlier application of the holding company. [42]

Railroad financing : 1900 - 1917. Between 1897 and the opening of the Great War, the proportion of bonds to stock gradually increased. This trend has been explained as being due mainly to three reasons: (1) the recognition by the management of the advantages of trading on equity during a period of substantial earnings; (2) the desire to perpetuate control of subsidiary companies by means of a relatively small and closely held portion of the capital stock; and (3) the large part played by collateral trust bonds as a consolidation device. [43] In 1917, collateral trust bonds composed 9 per cent of the entire funded debt of active companies. Funded debt as a whole comprised 55 per cent of total capitalization, as compared to 49 per cent in 1900. [44] During this period came a growing recognition that regulation of security issues could not be left to the individual states. However, it was not until the passage of the Transportation Act of 1920 that the Interstate Commerce Commission finally obtained control over railroad security issues. In the meantime (by 1917) 23 states had effected some form of control over railroad

4° For the best account of the reorganizations of this period, see E. G. Campbell, *The Reorganization of the American Railroad System, 1893-1900* (New York: Columbia University Press, 1938).

[41] T. W. Mitchell, "The Collateral Trust Mortgage in Railway Finance," *Quarterly Journal of Economics,* 20:443 (1906).

See pp. 612-614.

[40] Ripley, *op. cit.,* pp. 109-114.

"Interstate Commerce Commission, *Statistics of Railways in the United States,* 1900 and 1917.

security issues. The provisions ranged from mere publicity requirements in some states to almost complete and unlimited commission control in others. The laws of Massachusetts, Texas, and New York were particularly strict.[45] But, because of the scope of the carriers' activities and financing, state regulation had little effect on the railroads' financial structure as a whole.

Transportation Act of 1920. From December 28, 1917, to March 1, 1920, the railroads of the United States were operated by the Federal Government. The Government guaranteed the roads a return equal to that earned in the pre-War period. Rates were not raised in proportion to increased operating expenses, and railway earning power declined to an all-time low. The result was a series of deficits, which were paid by the Federal Treasury. The Transportation Act of 1920 returned the roads to private control, and, among other provisions, included clauses intended to improve and stabilize railroad earning power. The provisions of this act most directly concerned with railroad finance may be summarized as follows:

1. Railroad credit was to be preserved by the "rule of rate making," whereby the Interstate Commerce Commission was directed to set the general level of rates for the carriers as a whole or in large groups, so that they might earn a fair rate of return on the fair value of property used in transportation. The rate of return was finally fixed at 51 per cent on the valuation which had been determined under the Valuation Act of 1913.
2. Since individual carriers might earn more than the group, because similar rates would have to be set for competing railroads, it was provided that one half of the earnings over 6 per cent on valuation was to be placed in a "recapture" fund to be lent to weaker roads.
3. Commission approval was necessary for new construction and for abandonment of facilities.
4. Commission approval was required for the acquisition of control of one carrier by another through lease or stock ownership.
5. The Commission was directed to draw up a plan of consolidation of all railroad companies into a limited number of systems. The Commission published tentative consolidation plans in 1921 and 1929, but the advent of the depression drew attention away from the process of wholesale consolidation.
6. The Commission was given complete jurisdiction over the issuance of new securities as to amount, purpose, and application of funds. Its approval was required for all new issues, including those issued in reorganization and consolidation. Notes maturing in two

[45] D. P. Locklin, *Economics of Transportation* (Chicago: Business Publications, Inc., rev. ed., 1938), p. 596.

years or less were excepted, unless they totaled more than 5 per cent of outstanding securities.

These provisions, designed to bring improvement and order to railroad regulation, represented a constructive attempt to treat the railroads fairly. However, the Commission did not raise rates to the point where they would yield the fair return of 51 per cent upon the fair value of railroad property used for transportation. Perhaps, in view of the rising tide of truck competition, it would have been unwise to have attempted such rate increases. The railroads themselves cooperated in causing many rate reductions in the decade of the 1920's to hold traffic. Actually the gradual rise of business volume during that decade resulted in earnings that came close to the standard return, and railroad credit was gradually restored.

In passing, it may be noted that the "fair value" used by the Commission was the independent valuation made by the Government under an Act of Congress sponsored by the elder LaFollette in an effort to uncover "water" in railroad capitalization. Individual roads fared unequally in the study, and the total figure obtained was somewhat lower than the asset figure on the books of the companies, but it was in excess of the total outstanding capitalization." Critics of the railroads had overlooked three factors: (1) the substantial improvements and additions to property that had been made without selling securities since the early promotional period, (2) the rise in the general price level during the early part of the century, and (3) the increase in the value of land used through population growth—largely made possible by the railroads.

The provision for the recapture of one half of any excess operating earnings over 6 per cent upon the fair value of the transportation property was fought by the railroads and, as a result of litigation, was never enforced. When the depression struck down earning power in the early 1930's, Congress repealed that section of the act. Depression losses had brought the average earnings for most roads to a fraction of the "fair return." Had a fund from recaptured earnings been created, however, it could have been used for loans to the weakened railroads and to a considerable extent would have cared for the rescue work that the Federal Government felt obliged to carry on through the Reconstruction Finance Corporation.

Consolidation plans were made but were little beyond the discussion stage when the depression of the 1930's pushed the problem into the background. The difficulties lay in (a) the fact that the Commission could recommend but could not compel, (b) the con-

" A convenient discussion of the principles and procedure of valuation of railroad property is found in H. G. Moulton and associates, *The American Transportation Problem* (Washington: The Brookings Institution, 1933), Chapters XVII-XX. A comparison of investment, capitalization, and valuation amounts appears on p. 418 of this work.

flicting ambitions of the different railroad systems, and (c) the fact that consolidations require patient and lengthy negotiation. Another problem was the observance of the provision in the act that, in recommending consolidations or approving those submitted by the railroads on their own initiative, the Commission should preserve existing competition.

Post-War finance. When we turn to actual financial policy of the railroads, we find that in the early 1920's efforts were directed mainly toward making up the deficiencies which had accumulated during the difficult interval between 1914 and 1920. From 1921 to 1924, inclusive, the investment in fixed property of Class I railways devoted to railroad transportation increased 1.7 billion dollars. Bonds were issued to the extent of 1 billion dollars, stock increased 338 millions, and surplus increased 580 millions.[47] During these years the bond market was improving steadily and the yields on new issues declined. Stocks were still depressed, and few roads were in a position to use them for new money. The market for bonds was helped by the general assumption that railway earning power would be large enough and stable enough to support a large burden of fixed charges, owing to the fundamental importance of the industry in our economy, its long-standing monopoly of transportation, and the protection which regulation of rates under the Transportation Act promised to afford.[48] Fiduciary investors, such as savings banks and life insurance companies, as well as many conservative individual investors, were, as in previous years, important buyers of railroad bonds.

In the period after 1924, and particularly during 1927 and 1928, the railroads turned to the use of stock, especially common stock, and reinvested earnings to an unprecedented degree. The composition of the gross capital structure was changed accordingly. During the five-year period 1925-1929, Class I roads increased funded debt only 9 million dollars, while common stock increased 458 millions, preferred stock 280 millions, and surplus 1,518 millions." The switch to stock and earnings as the major sources of funds was due to the strength of the stock market and the increasing earnings of

" Interstate Commerce Commission, *Statistics of Railways in the United States,* 1920 and 1924, Statements No. 18 and 42.

" The doctrine that railroads and other public service companies should be allowed rates so as to earn a "fair return" on "fair value" was first laid down by the Supreme Court in Smyth vs. Ames, 169 U. S. 466 (1896). This principle has been an important factor in Interstate Commerce Commission rate decisions, although there has been a long controversy as to what constitutes "fair return" and "fair value." It was not definitely incorporated into railway statute law, however, until 1920. While involving no guarantee of an adequate return on invested capital, the rule of rate making recognized the need for rates high enough to attract capital to the railroad industry.

" Interstate Commerce Commission, *Statistics of Railways in the United States,* 1924 and 1929, Statements 18 and 42.

the industry. Yet some have criticized the industry for not making the most of its opportunity to effect an extensive substitution of stocks for bonds during the stock market boom. While a number of roads financed all new additions by stock issues, rarely was stock used to reduce funded debt." The latter would have meant a reversal of the industry's tradition, and to have replaced the typical low coupon bond with higher yielding common would have seemed doubtful wisdom at that time. As Moulton suggests, "Looking backward now, it is easy to say of many roads that if they had taken advantage of the investment situation in 1925-1929 to float stocks they would be in better financial shape now. Better, that is, from the standpoint of the managements. But we can hardly take the position that managements of railroads ought to have foreseen the coming of the greatest depression in history. . . . " [51]

Table 22 gives a comparison of the capital structure at the beginning and the end of this decade, indicating the relative importance of the several sources of funds. Corporate surplus grew from 15 per

TABLE 22

CAPITAL STRUCTURES OF CLASS I RAILROADS

	Amounts (in millions)			*Percentage Proportions*	
	1920	*1929*	*Increase*	*1920*	*1929*
Bonds	$ 9,645	$10,638	$ 993	49%	45%
Preferred stock	1,658	1,905	247	8	8
Common stock	5,552	6,280	728	28	26
Surplus	2,941	5,029	2,088	15	21
	$19,796	$23,852	$4,056	100%	100%

Source: Interstate Commerce Commission, *Statistics of Railways in the United States,* 1920 and 1929, Statements 16A and 42.

cent in 1920 to 21 per cent of the total capital structure in 1929, representing an increase of approximately 2 billion dollars, or an amount about equal to the sum of the increase in both stocks and bonds, which increased approximately 1 billion dollars each. Since net worth, or the sum of stock and surplus, was increased about three times as much as funded debt, it would seem that charges of reckless

[51] Moulton and associates, *op. cit.,* pp. 304-306. This source classifies the railroads according to their relative use of bonds and stocks in the period 1926-1930 (p. 305). Certain roads financing chiefly through bond issues, like the Chicago, Rock Island & Pacific, the Missouri Pacific, and the Wabash, were among the first to go into receivership when depression set in at the end of the period. However, even in the boom years, the earnings of such roads were not substantial enough to support new stock issues. As Moulton points out, the railroad industry is the only one of which it is ever said that it sells bonds because it cannot sell stock (p. 307). Bonds can sometimes be issued which take precedence in investment status over much existing funded debt.

[51] *Ibid.,* p. 309.

financing by the railroads during this period have a very doubtful foundation in fact. Not only did stock flotations exceed the increases in funded debt in the last half of the decade, when the market had risen to the point where the sale of stocks was practicable, but the roads which were exceptional in their heavy reliance upon bond issues were characteristically the weaker roads and would have experienced difficulty in selling anything but bonds—a condition that was characteristic of the industry during the period 1921-1924.

As for the proposition that the railroads should have refunded bonds into stocks, it might almost be dismissed with the statement that the strong roads did not feel they needed to, and the weak ones were unable to. Actually such refunding could have been carried through by the stronger roads but would have seemed very expensive, because during this period common stocks typically had to earn twice as high a percentage to support a dollar of investment (market) value as a bond needed in the way of interest yield." Save for someone sufficiently clairvoyant to have foreseen the devastating decline in earnings coming in the 1930's, such a dilution of the common stock's earning power would have seemed most undesirable. Therefore even in those cases where, by careful management and timing, bonds might have been refunded into common stock, the temptation was strong to let matters alone and retire bonds only when retained earnings were not greatly needed for improvements and additions and could be used to pay off convenient small maturities.

Railway finances during the depression. The drastic shrinkage in railroad net income which began in 1930 and continued to 1934 was due to the deadly combination of declining gross revenues and static fixed charges. The shrinkage in traffic resulting from the industrial depression, the competition of newer transportation agencies—especially the motor truck—and the pressure of a huge burden of fixed charges together caused the net profit of the industry to decline over 1 billion dollars in the three years 1930 to 1932, inclusive. Table 23 indicates the extent of this change and the degree of recovery to the end of 1936. [53]

In the face of this serious shrinkage in earnings, the roads having more than the average burden of fixed charges were forced into receivership (after June, 1933, into bankruptcy). In 1932, 122 out of 162 Class I railroads, operating 74 per cent of Class I mileage, failed to earn their fixed charges. By the end of 1935, 33 Class I roads,

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52 H. G. Guthmann, "Railroad Security Yields to Investors," *Journal of Land and Public Utility Economics,* August, 1931, pp. 255-261.

"Bureau of Railway Economics, *Statistics of Railways of Class I, 1926-1936* (Washington, 1937) , pp. 1, 2.

operating 68,399 miles, more than one fourth of total Class I mileage, were in the hands of receivers or trustees.[54] Three years later this number of roads had increased to 39, and the affected mileage had increased to 32 per cent.[55] This financial situation was the worst in railway history."

With respect to their financial condition, railroads may be divided into three groups in so far as their depression experience is concerned: (1) those whose earnings or working capital or both were ample to support their fixed charges and to provide for either the retirement or the refunding of maturing debt; (2) those able to meet maturing debt, interest, and taxes only with the aid of special emergency lending bodies; and (3) those forced to default on principal or interest and seek the refuge of receivership or trusteeship in bankruptcy.

TABLE 23

RAILWAY EARNINGS, 1929-1936
(in millions)

Year	Total Operating Revenues	Net Railway Operating Income*	Total Income Available for Fixed Charges	Interest and Rentals	Net Income
1929	$6,280	$1,252	$1,589	$692	$897
1932	3,127	326	527	666	139 (d)
1936	4,053	667	831	666	165

d = deficit.
* This figure is used to calculate the rate of return earned on book investment. In 1926 the rate was 4.99 per cent on book investment, the highest on record in recent years. In 1929, the rate was 4.84 per cent; in 1932, 1.25 per cent; and, in 1936, 2.59 per cent. This rate is for all roads as a group. Individual carriers have had higher and lower rates of return than the group.
Source: Interstate Commerce Commission, *Statistics of Railways in the United States* (annual).

The first group included the strong lines which, while hard hit, managed to avoid serious difficulty. Such representative carriers

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" Bureau of Railway Economics, *A Review of Railway Operations in 1935* (Washington, 1936), p. 14.

By the first of 1939 a total of 111 companies and 78,016 miles of all classes was in the hands of the courts. Bureau of Railway Economics, *A Review of Railway Operations in 1938* (Washington, 1939), p. 16.

" *Ibid.* (1938), p. 23.

" Railroad dividend distributions averaged 365 million dollars per year from 1922 to 1929, or 57 per cent of net income, In 1930 the carriers distributed 106 per cent of their net, and in 1931, 415 per cent. It is the opinion of some that the dividend distributions of 1930 and 1931 were excessive and contributed substantially to the weakening of the companies' financial position at the beginning of the depression *(cf.* Moulton and associates, *op. cit.,* pp. 316-320). The opinion may be exaggerated, because the dividends are measured not against the earnings of the individual roads paying them but against all roads' earnings, including nondividend-payers with deficits. There is also a strong tendency for dividend policy to lag after the earnings trend, making the percentage paid out in dividends appear high in periods of declining earnings and low in periods of rising earnings.

as the Atlantic Coast Line, the Atchison, Topeka and Santa Fe, the Chesapeake and Ohio, the Pennsylvania, and the Union Pacific were in this group. During the depression years proper, from 1930 to 1933, new financing was at a minimum. Even these strongest carriers curtailed new additions to property and confined their financing to the refunding of maturing bonds.[57]

The second group of carriers included companies forced to obtain aid from emergency credit sources in order to avoid default. (Some of those which were at first in this group, such as the Missouri Pacific and the New York, New Haven & Hartford, succumbed later and became insolvent.) The Railroad Credit Corporation was organized by the carriers toward the close of 1931 to lend to weak carriers from the pooled receipts arising from freight surcharges which were allowed on particular commodities in 1931 in part for the purpose of raising a fund. Loans were made solely for the purpose of preventing interest defaults. In May, 1933, at the expiration of the lending period, the outstanding loans amounted to $73,691,000.[58] Since that date the corporation has been collecting loans and returning their payments to the railroads which were the original contributors. By the end of 1938, 771 per cent of the contributions to the pool had been repaid to the participating carriers.[59]

The other two emergency sources of funds were public rather than private. The Reconstruction Finance Corporation, organized in 1932 to aid railroad corporations, banks, and insurance companies in distress, was owned and financed by the United States Treasury and was empowered to make loans adequately secured by collateral to railroads, on the approval of the Interstate Commerce Commission, for purposes of meeting maturing interest and principal of debts, taxes, repairs, and construction projects. The Public Works Administration, although primarily interested in civil projects, was also permitted to make loans secured by collateral to railroads for construction and improvement purposes. Such loans were designed to encourage railroads to undertake construction somewhat sooner than they might otherwise do, rather than to provide financial rescue as in the case of most of the RFC loans. At the end of 1938, RFC and PWA loans had been made to railroads to the amount of 826

" The gross capital expenditures, of Class I railways declined from 873 million dollars in 1930 to 104 million dollars in 1933. The total for the four years was 1,506 millions, as compared to the 3,187 millions added in the previous four years. Bureau of Railway Economics, *A Review of Railway Operations in 1930,* p. 35, and *in 1933,* p. 29 (Washington, 1931 and 1934). The volume of railroad securities, floated declined in like measure from a high of slightly over a billion dollars in 1930 to a low. of 61 millions in 1932. Moody's *Manual of Investments, Railroads,* 1936, p. a21.

"Bureau of Railway Economics, *A Review of Railway Operations in 1934* (Washington, 1935), p. 4.

"Bureau of Railway Economics, *A Review of Railway Operations in 1938* (Washington, 1939), p. 16.

million dollars, of which 243 millions had been repaid and 106 millions had been liquidated through sale of the railroad bonds to the public, leaving 477 millions still held by the government. [60] Without special emergency aid, more carriers would have been forced to default than did eventually come to grief.

The Great Northern sought a different way out of its difficulties. Three series of assumed bonds issued by the St. Paul, Minneapolis and Manitoba Railroad Co., amounting to $41,963,000, were to mature on July 1, 1933. The company did not have the funds to retire the bonds, nor did it have any assurance of RFC aid for this purpose. It offered the bondholders $30.16 in prepaid interest per $1,000 bond if they would turn their bond issues in and have their maturity extended to 1943 and the interest rate changed to 5 per cent (from 6, 4, and 42 per cent). The company borrowed $6,000,000 from the RFC to assist it in paying its July 1 bond interest on this and other issues.

The third group of carriers includes that considerable number of roads already mentioned as unable to survive the combination of declining earnings and heavy fixed charges.

Past experience in railroad reorganizations having shown them to be both slow and expensive, an amendment (Sec. 77) to the Federal Bankruptcy Act was signed by President Hoover on March 3, 1933, providing for the reorganization of railroads while in the hands of a trustee in bankruptcy, instead of reorganization "in equity." Under the terms of this amendment, a plan of reorganization approved by two thirds of each class of creditors and by the majority of stockholders if the road is solvent, the court in charge, and the Interstate Commerce Commission becomes binding upon the minority groups. It was hoped that railroad reorganizations would thereafter be more thorough, speedier, and less expensive, because of the requirement of Commission approval in the early stages, elimination of long and costly bickerings among and between protective committees, and the avoidance of ancillary receiverships in each Federal district where property is located. [61] At the time of writing, however, no railroad reorganization of importance has been completed. [62]

In an effort to deal with financial, operating, and regulatory problems of the whole transportation industry, Congress passed the Emergency Railroad Transportation Act in 1933 which created the office of the Federal Coordinator of Transportation and directed

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60 Ibid. Of this total, RFC loans outstanding amounted to 436 million dollars.

" See Chapter 28 for a more complete discussion of corporate reorganization.

" The plan of reorganization of the Chicago and Eastern Illinois Railway Company was approved by the Interstate Commerce Commission in January, by the court in charge in June, and by the security holders in November, 1939, but at the time of writing had not been put into effect.

him to prepare a series of recommendations on transportation policy. In addition, the act struck out the "rule of rate making" and "recapture" clauses of the Transportation Act of 1920 and substituted for the definite requirement of a fair rate of return on railway property investment a rather vague clause which provides the Interstate Commerce Commission with no precise formula for regulating the general rate level. Included in the many reports which the Coordinator presented (his office expired in June, 1936) were recommendations with respect to the regulation, organization, labor policy, and operation of the railroads and their competitors, some of which have been enacted into law (for example, the Motor Carrier Act of 1935, placing interstate trucking under regulation) . In so far as railroad financing is concerned, the Coordinator opposed wholesale consolidation and was instrumental in obtaining some amendments to Sec. 77 of the Bankruptcy Act governing railroad reorganization.

Recent railroad financing. The improvement in railroad earnings, which began late in 1933, coupled with the decline in interest rates in the bond market after that year and the recovery in the stock market, brought a new lease of life to the railroad industry and made possible a hope for more normal financing for the roads which had survived the ordeal. During the years 1934-1936, gross capital expenditures of Class I railroads amounted to 700 million dollars.[63] A total of $1,218,196,000 of new rail bonds and notes were floated during these years, and $3,828,000 of stock was issued in 1936, the first stock financing since 1930.[64] Most of these issues, however, were for refunding purposes, to care for maturing issues and take advantage of the low rates prevailing in the bond market. Moody's weighted average of yields on newly issued railroad bonds reached the low figure of 3.76 per cent for the year 1936.[65] The stronger carriers made good use of the record low costs of capita1.[66] Some roads succeeded in selling junior bonds by the use of the convertible feature and so capitalized on the renewed optimism of the period.[67] Since this revival of earnings and bond financing, an-

[63] Bureau of Railway Economics, *A Review of Railway Operations in 1936* (Washington, 1937), p. 29.

[64] Moody's *Manual of Investments, Railroads,* 1937, p. a20. The stock was the 5 per cent cumulative convertible preferred issued by the Bangor and Aroostook Railroad to redeem its old 7 per cent preferred.

[65] *Ibid,* p. a5.

[66] In August, 1935, the Pennsylvania Company (a holding company affiliated with the Pennsylvania Railroad Company), which owns large blocks of stock in the Lehigh Valley, the Norfolk and Western, and the Wabash, sold at par $50,000,000 of 4 per cent bonds, secured by the pledge of. Norfolk and Western common stock. In 1936, as a part of the flood of new security issues placed on the market during that year, the railroad group contributed the $40,000,000 Pennsylvania 31's and the $99,422,400 Great Northern general mortgage convertible 4's (offered to stockholders and underwritten by the RFC).

[67] In April, 1934, the New York Central sold $59,911,000 of 6 per cent ten-year secured convertible bonds at par, at a time when the company was not earning

other severe recession has hit the railroads in 1937-1938, the effects of which it is as yet too early to appraise.

Current Financial Problems

The problem of adequate earnings. The events during the period since 1930 have raised the question as to whether the industry will be able to support its present debt structure and attract such new funds as may be necessary to provide adequate transportation service. Has the industry passed through the period of maturity in its life cycle and entered the period of financial senility? The fact that after a period of business recovery almost one third of our railway mileage is in receivership or bankruptcy gives point to this question.

To command new money and to support existing debt there must be at least enough revenues to pay expenses, taxes, interest, and rentals. If a well-balanced capital structure is to be maintained by the occasional sale of common stock, a further reasonable return must be earned for the stockholders. The depression period from 1930 on showed greater vulnerability of the industry to competition and to changing business conditions than the financial community had expected. Gross operating revenues of Class I railways declined 50 per cent between 1929 and 1933, and net profit declined a billion dollars—from 897 million dollars, a return of 11 per cent on the par value of all outstanding preferred and common stock, to a deficit of 139 million dollars. After partial recovery in the ensuing period, earnings again slumped in 1937 and 1938, the latter year producing a deficit of 123 million dollars.[68]

Future financial policy must be centered mainly around the problem of adjusting capital structures to a fluctuating and perhaps permanently impaired earning power. The "railroad problem," in brief, is to so increase revenues, decrease expenses; or decrease fixed charges, or a combination of these, as to regain a position of financial strength. Let us consider these requirements in turn.

Problem of increasing revenues. The income available for fixed charges and dividends is the excess of total operating revenues over expenses of operating, including taxes, plus "Other Income." Since "Other Income" is chiefly interest and dividends derived from intercompany investment holdings, it requires no separate discusgion here. The balance of net earnings was quite adequate to support the present capital structure of the industry as a whole during the

its fixed charges but was enjoying increased income and rising common stock prices. With a favorable stock market, the company forced the conversion of the issue as a preliminary to its sale of an issue of secured convertible 3i's on June 30, 1937. Another outstanding issue of 1937 was the $52,670,700 of convertible debenture 31's offered by the Pennsylvania Railroad Company.

[68] Bureau of Railway Economics, *A Review of Railway Operations in 1938* (Washington, 1939), p. 17.

latter half of the 1920's, although there were individual exceptions, like the Chicago, Milwaukee and St. Paul, which required reorganization. Although the rate of return from operations [69] earned by all Class I railways reached a peak of only 4.99 per cent in 1926, the carriers as a group were able in pre-depression years to round out operating earnings with income from nonoperating and investment sources and, by using low interest-bearing senior securities, to show respectable earnings on their equity. The stronger carriers were able to distribute liberal dividends. However, between 1926 or 1929 and 1933, total operating revenues declined about one half, a shrinkage of over 3 billion dollars. In 1937 only about one third of this loss had been recovered. To get back to the pre-depression level of earnings, the carriers must greatly increase their operating revenues or effect an extraordinary shrinkage in operating expenses and taxes.

As for an increase in operating revenues, passenger revenues, which now amount to only 10 per cent of the total, as compared to 21 per cent in 1920 (the peak year for passenger traffic), are not likely to contribute materially to increased earning power. They have shown some increase since the bottom of the depression but have continued to show diminishing relative importance, as appears in the breakdown of operating revenues shown in Table 24. [70]

TABLE 24

TYPES OF RAILWAY REVENUES, 1929-1937
(dollars in millions)

	1929		*1932*		*1937*	
Freight revenues	$4,826	77%	$2,451	78%	$3,377	82%
Passenger revenues.	874	14	377	12	443	10
Mail, express, and other	580	9	299	10	346	8
Total operating revenues...	$6,280	100%	$3,127	100%	$4,166	100%

Freight revenues, cut in half by the combined assault of competition and depression between 1929 and 1933, had made up only one third of the shrinkage in the five years of recovery to 1937, a year that was succeeded by further depression. Owing to the loss of much of the higher-rate traffic to the highway, it seems unlikely that the freight revenues will ever regain the 1926-1929 level, although coordination and the expansion of rail service into the field of motor transport is winning back some lost traffic. There is also the possibility of increases in freight rates if earnings remain at a subnormal level, although it is limited by the presence of competi-

[69] Percentage of net railway operating income to investment in road and equipment before depreciation, including materials, supplies, and cash.

[70] Class I railways, excluding switching and terminal companies.

tion and the counter pressure of freight shippers. The most important hope for revival of revenues depends upon a revival of the heavy-goods industries, which require the movement of materials for which the railroads are especially fitted. The relative failure of construction to revive along with consumer goods has led some to hope that freight traffic might improve substantially with a "normal" recovery in the so-called heavy-goods industries. There is also the longer-term possibility of a growing volume of national production as the result of increasing prosperity and some further limited increase in population.

Problem of reducing expenses. Fortunately for the carriers, they were able to cut their operating expenses during the depression and recovery years in nearly the same proportion as revenues declined. As a result, the operating ratio, or ratio of operating expenses to operating revenues, increased but slightly. Table 25 shows the operating revenues, expenses, and operating ratio.

TABLE 25

RAILWAY REVENUES AND EXPENSES, 1929-1937
(dollars in millions)

	1929	*1932*	*1937*
Operating revenues	$6,280	$3,127	$4,166
Operating expenses:			
Maintenance	2,058	970	1,322
Other operating expenses	2,448	1,433	1,797
Operating ratio	72%	77%	75%
Taxes, etc.	522	397	457
Net railway operating income	$1,252	$ 326	$ 590

The savings in maintenance allowed property to deteriorate somewhat and so deferred a certain amount of expense to future years. Much of the savings in maintenance and transportation expense was due to a reduction in the number of employees from one and three-quarters millions to just under a million by 1933. In spite of the plight of the railroads, wage rates were reduced but little during the depression and have since (1938) risen to a new high level." The well-organized railroad brotherhoods rank among the strongest unions in the country and have shown no willingness to adjust wages to conditions in the industry. Since salaries and wages make up over half of the operating expenses, the chief hope of management lies in reducing costs through the more efficient use of labor. Management also tries to prevent crippling legislation, such as would

" The average earnings of railroad employees per hour, excluding executives, officials, and staff assistants were as follows: 1929-67.5 cents; 1932-64.6 cents; 1937-72.7 cents. Bureau of Railway Economics, *Statistics of Railways of Class I, 1926-1938.*

limit the length of freight trains and require unnecessarily large working crews.

Because of the basis upon which the income tax is levied, railway taxes have shown some flexibility. They declined from 397 millions in 1929 to 236 millions in 1935, but the combination of higher earnings and increased levies sent them to 326 millions in 1937 and to 341 millions in 1938 in spite of business recession.

In view of the slowness with which revenues have risen in recent years and the relative inflexibility of expenses, it is but natural to come to the consideration of whether or not the fixed charges themselves may not be adjusted.

Adjustment of fixed charges and funded debt. Our review of railway history earlier in this chapter indicated how funded debt came to play such an important role in railroad financing, until it constituted about one half of the total capital structure. Interest charges total some 500 millions of dollars, a reduction of about one tenth since the beginning of the present decade as the result of refunding and retirement. Total fixed charges, including rentals, run over 650 millions of dollars. An important fraction of this amount is in default. How may this situation be improved?

Five principal methods appear by which the proportion of debt to the stockholders' interest may be reduced: (1) by retirement of debt out of earnings, including the use of sinking fund and serial retirement methods; (2) by the retention of earnings to build up the common stock equity; (3) by the use of convertible bonds; (4) by the sale of stock to replace bonds or by simply financing by stock to a greater extent than by bonds; (5) by reduction of debt in financial reorganization. Most of these methods have already been discussed in previous chapters, and so only certain aspects of the first, fourth, and fifth points as they relate to railroad finance will be covered here.

Debt retirement. It has been pointed out earlier that most railroad companies have regarded their bond issues as permanent debt, to be refunded rather than repaid. Now that the load of debt appears to be too great, sinking funds are found in the newer bond issues. The impetus behind this change has come from two sources —the investment market and the attitude of the Interstate Commerce Commission. The Commission indicated in its annual report for 1933 that it intended to require sinking funds in bond issues referred to it for authorization.[72] As a result of this policy, in all

[72] *47th Annual Report of the I. C. C.* (Washington, 1933), p. 26. For an exhaustive study of railroad practice, see W. H. S. Stevens, *Railroad Sinking Funds and Funded Debt* (Washington: Interstate Commerce Commission, 1939). This study reports (pp. 17-20) that, as of December 31, 1935, of the 51 large Class I railways whose total debt (9 billion dollars) comprises 70 per cent of the total debt of all the railroads, 28 had "sinking fund" debt outstanding

cases when the Commission has been called upon to approve the actual issue of bonds, it has insisted "that the applicant make provision for the retirement of all or part of the bonds before maturity," unless sufficient reasons for not doing so are presented." In addition to the going concerns, practically all companies which are now undergoing reorganization and have filed reorganization plans with the Commission have included sinking fund provisions.

Rigid sinking fund requirements may work a hardship on particular companies by requiring the retirement of bonds bearing low coupon rates and refinancing in the market at higher rates; or by requiring the reduction of debt instead of permitting investment in very productive improvements. For these reasons, flexible sinking fund arrangements are sometimes advocated.[74]

Without the mandatory sinking fund arrangement, whether or not debt is retired out of earnings depends on the management's attitude toward the alternative uses to which earnings may be put—reinvestment in property and distribution to stockholders. Since 1930 at least, there have been few companies in a position to do either. A return to something like pre-depression earnings will, however, permit at least the stronger roads to retire debt from earnings. But the process is slow, and if made rigidly compulsory it may merely force the roads to sell more securities or else forego improvements that may be desirable from the standpoint of service to the public and of maintaining the railroads' competitive position in the field of transportation.

Said of stock to retire debt. The difficulty of selling stocks, particularly common stock, to retire an excessive debt has already been pointed out, as was the fact that in only one period of recent railway history—the years 1925 to 1929—did the railroads rely to a considerable extent on stock for their new money. Only one stock issue has been marketed since 1930—the Bangor and Aroostook preferred issue of 1935. Only a handful of carriers could attract new funds today by offering stock. Until the outlook for earnings improves materially, this method of relief from a capital structure top-heavy with debt cannot be generally used.

The laws of many states prohibit the sale of stock below par

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of 1.4 billions, or 15.6 per cent of their total. But of this "sinking fund" debt only 8 per cent required unconditional payments, the balance having only conditional or voluntary payments.

"*50th Annual Report of the I. C. C.* (Washington, 1936), p. 17.

"See Chapter 8 for a more complete discussion of sinking funds.

For an interesting discussion of a flexible sinking scheme, see Irvin Bussing, *Railroad Debt Reduction* (New York: Savings Banks Trust Co., 1937). This plan suggests an annual charge against net earnings after interest, governed in amount by (a) the proportions in the capital structure and (b) the amount of earnings available—the fund to be used to retire debt or to provide additions and betterments which are expected to earn an adequate return or both.

value, so that, if common stock prices continue to be depressed, one solution might be for the railroad wishing to sell its stock to lower its par value or change to no par." This step may represent a realistic recognition of the permanent loss of investment value of the railroad property behind outstanding stock, or it may lay the basis for an ill-timed sale of common stock at less than its long-run value, which will average down the values and so dilute the investment of existing stockholders.

Debt reduction by reorganization. The process of financial reorganization is described in detail in Chapter 28. It is sufficient here to say that the fundamental purpose is to cut down fixed charges to a point where they can be reasonably expected to be paid even in poor years. Insolvency having visibly demonstrated that a railroad cannot pay the interest charges it has assumed, a change in contractual arrangements becomes inevitable. Bondholders are obliged to accept contingent charge obligations, such as income bonds and preferred stock, or even common stock, for their former claims. The slowness with which railroad reorganization plans have moved recently has been the result of the tardy recovery of railroad earnings. Security owners and those in charge of reorganization have hoped that with the passage of time earnings would improve considerably and make possible a less drastic change in the position of the bondholders and stockholders.

The extent to which the fixed charges and debt burden of the industry will be reduced as a result of the reorganizations now pending is impossible to predict. The attitude of the Commission indicates that the new plans will be much more drastic than those of most reorganizations in the past, which, in view of the disappearance of the former rapid growth trend, would appear logical. In the meantime, until reorganizations are consummated, or until railway earnings as a whole are substantially increased, the industry will remain, in so far as earnings are concerned, in a state of excessive indebtedness.

" An example of this practice, not to permit a sale of stock, but to allow an issue of bonds convertible at $40 per share, was the change of the stock of the New York Central Railroad Company from $100 to no par in 1934.

CHAPTER 14

INVESTMENT BANKING

INVESTMENT banking is the merchandising of securities. While he performs other related functions, the distinctive service of the "banker" in this field is to act as the middleman between the corporations and governmental bodies which need money and the investors who purchase the obligations of these users of funds. Unlike the broker, who acts only as an agent, buying and selling for the account of others in return for a commission, the investment banking house purchases blocks of bonds or stocks for its own account for the purpose of merchandising them at an advance in price.

Advantages of Investment Banking

Advantages to the corporation. The economic position of security merchants is that of most middlemen. Through their specialization of function they are able to accomplish more cheaply the distribution of securities from "producer to consumer." Financing is a relatively infrequent occurrence for most corporations, and setting up a special department or organization to perform that function would be more expensive than to employ the investment banker, who is already established to dispose of a securities issue as part of his regular flow of business. A second advantage to the corporation is that the middleman assures the prompt receipt of all needed capital. The risk of delay or of partial failure is shifted from the shoulders of the "producer" of the securities to those of the merchant. And, finally, an effective merchandising organization should be better able to reach the most satisfactory market, so that the best possible prices and widest distribution are obtained. The successful introduction of the securities to an enlarged list of investors increases the potential investment market for any subsequent financing and has value not only for the corporation but also for existing security holders.

Further advantages. In addition to the foregoing advantages to the corporation, certain other secondary advantages flow from the employment of the investment banker for both the corporation and the buyer of securities. Since some of these advantages are mutual for both, they are grouped here on the basis of primary interest in the given advantage. For the corporation these are: (1) advice with regard to the initial financing, (2) continuing counsel after the

financing has been completed) and (3), possibly, financial aid in times of stress which might not be available had arelation not been already established.'

l.-- *Banker advice on financing.* Even though the management of a corporation is well informed in financial matters, the presumption is strong that a competent investment banker in close touch with the market to which an appeal for funds is to be made can give valuable advice with regard to a new piece of financing. The problem is not merely to sell some securities but to sell them in a form which, while meeting the peculiar needs of the corporation, will fit the demands of the market in such a way as to obtain the funds most cheaply and with a minimum of objectionable restrictions. The market at any given time has its likes and dislikes, which the investment banker studies. Leading points to receive consideration are the type of security to be offered, the time at which the offering shall take place, and—if the security is a bond or preferred stock—the form of protective provisions, sinking fund, and other possible arrangements for repayment, the call price, and the coupon or dividend rate. Sometimes when the corporation has been newly formed as the result of a consolidation, or in case of an offering of securities in a business formerly without any public investment, the banker may suggest not only the most appropriate kinds of stocks and bonds but also the amounts of each sort.

The type of security -is-determined partly by the time at which the financing is done, partly by convention, and partly by the class of security buyers to be sought. At most times a large corporation of reasonable strength can offer either bonds or stocks, although custom will limit the use of the former. In times of financial distress, however, owners of funds are apt to be exceptionally timid, and bonds of the best grade may offer the only hope of raising money no matter how sound the corporation's position may be. To attempt a stock issue at such a time would be to court failure, regardless of how desirable such an issue might appear from the standpoint of financial theory. At other times common stocks may command such high favor as to result in a speculative boom accompanied by credit strain, such as appeared in 1928-1929, with the result that a sale of bonds could be effected only at an unreasonably high interest rate. In a period of this type, common stocks are more logical than bonds, and class A common stocks are preferable to straight preferred issues. When bonds or preferreds are sold, a stock flavor in the form of a conversion or stock purchase warrant feature may be decidedly advantageous.

'In the past certain fiscal agent services were sometimes rendered. With the gradual shrinkage of private banking and the abolition of investment banking by security affiliates (1935), such functions are now performed by trust companies or the trust department of a commercial bank.

In addition, to the major question as to type of security to be offered, the details of form are often of first-rate importance. Perhaps the financing can be made to appeal to those investors who can or will buy only "legal" bonds—a particularly advantageous market because of its ability to absorb large blocks of securities at low interest rates. If so, care must be exercised to employ a suitable mortgage lien, to limit the interest burden to a proper percentage, of earnings, and to observe the other standards set by law in the important states. Such restrictions are placed upon investments legally, permissible for mutual savings banks, life insurance companies, and trustees. Some corporations enjoy such an investment rating that they can ignore considerations of this sort and still finance successfully. Other corporations, at certain times and in certain classes of business (as sugar, coal, and traction corporations in the late 1920's), may rest under such a cloud that, even when making a reasonably good showing, they are virtually unable to sell securities, regardless of the particular features inserted in them.

In addition to deciding between stocks and bonds, and then among the various subclasses of either, the details as to maturity, call price, sinking fund, and coupon or dividend rate must be determined by a nice balancing of the, preferences of the current investment market and the desires of the corporate management. The corporation may adopt a maturity for its bonds in accordance with the prevalent ideas of what is suitable, bmt, if current rates of interest are high, it can obtain the equivalent of short maturity by the use of suitable call provisions. A very short maturity has the positive disadvantage of forcing refunding which may be disadvantageous, if not actually dangerous to solvency, if conditions are unfavorable at the time of maturity. At times, however, short maturity—that is, one to three years—may have the advantage of commanding low interest rates if the issue is floated at a time when commercial banks are having difficulty in obtaining suitable short-term investments. At such times rates for commercial paper, bankers' acceptances, and call loans are considerably lower than the yields of high-grade bonds.

Until recently, the general rule for establishing the coupon rate upon corporate issues was to employ that rate which was a multiple of one-half per cent and would result in a price to the investor of par or a discount of not more than 10 per cent under par at the time of offering. With the advent of unusually low bond yields in 1934, coupon rates such as n and 34 appeared. At lower yields smaller absolute differences increase in relative importance, so that corporate bond coupons are now generally multiples of one-fourth per cent.[2] If, for example, a corporation's credit and the type of

States and municipalities employ rates which are a multiple of one quarter or even one eighth of one per cent on occasion, and the United States Govern-

bond it was offering warranted a yield basis of 3.10 per cent to the investor, coupon rates of 21, 3, 3¼, and 31 per cent might all be theoretically possible. The price would merely need to be adjusted so that whatever the coupon the buyer would receive 3.10 per cent upon his investment. The prices which would be needed to effect this net yield upon a 25-year bond would be as follows: [3]

Coupon	*Price*
21%	93.94
3	98.27
31	102.60
3½	106.92

With either the 31 or the 31 per cent coupon the bond would have to be offered at a premium and hence the issue might sell at a possible disadvantage. Even though this disadvantage amounted to only a fraction of one per cent in the rate of interest paid each year, the sums involved in the case of a large issue would be considerable and consequently worth saving. Individual investors are often biased against a premium bond. Their objections are that (1) a bond selling at a premium cannot be so much of a "bargain" as one selling at a discount, (2) the market price of a premium bond will decline toward par as maturity approaches, and (3) it is regarded as bothersome to be obliged to set aside a part of the receipts

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ment uses coupon rates which are multiples of one-eighth per cent, such as the Treasury 2i's of 1955-1960. Other odd rates are rare. For the accountant and statistician accustomed to using bond yield tables made up for the more usual coupons, unusual rates are a nuisance. Governmental units are sometimes forbidden to sell their obligations at a discount and so find a fractional coupon rate other than the conventional one-quarter per cent a convenient device, to permit the pricing either at par or at a smaller premium than would be otherwise possible. Fortunately for such civil debtors, the market for their obligations is more institutional and so is less likely to discriminate against a premium bond.

For a statement as to the use of bond yield tables, see R. E. Badger and H. G. Guthmann, *Investment Principles and Practices* (New York: Prentice-Hall, Inc., rev. ed., 1936), pp. 822-834. For fundamental mathematical formulas, see Justin H. Moore, *Handbook of Financial Mathematics* (New York: Prentice-Hall, Inc., 1929).

"Net yield to maturity" is computed so as to allow the annual income to include a properly prorated fraction of the discount if the bond is purchased under par, or so as to subtract a fraction of the premium from the annual income each year if the bond is purchased above par. In order to place such investments on a parity with those which pay all of their income in cash each year, any uncollected income in the form of accumulated discount is added to the original cost and becomes a part of the invested capital upon which a return is to be earned in succeeding periods at the same net yield rate as the original investment. Similarly any principal recovered from the annual coupon payments in order to write off the premium is subtracted from the original investment, since such recovered principal may be reinvested to earn its own return. The accumulation of discount and the amortization of premium is so computed as to give a constant rate of net yield to the investor upon his changing investment, which gradually approaches parity as the instrument approaches its maturity.

from the coupons and reinvest them in order to preserve the original principal intact. The first two objections are purely sentimental. Since a 25-year 31 per cent bond at 106.92 (per cent of parity) and a similar 21 per cent bond at 93.94 both yield 3.10 per cent, the latter cannot be more of a bargain. Nevertheless the psychological element which makes a $9.98 price tag much more appealing than one of $10 is operative here, at least among many individual investors. The tendency of both the premium bond and the discount bond to approach parity as maturity comes nearer is allowed for in both bonds. In computing the net yield basis, a certain fraction of the discount has been included in the income for the discount bond for each year, and so it is not "profit," and a deduction from the coupon has been made in arriving at the rate for the premium bond, and so there is no "loss" when the bond matures.

The care required of the investor in premium bonds in preserving his principal by reinvesting a portion of the coupon appears minor, but minor differences may influence a choice between competing investment offerings. Probably most individuals of the investing type would prefer a bond which made accumulation simpler by depriving them of a portion of their income (as with a discount bond) than a bond which made care necessary in order to avoid dissipation of principal (as with a premium bond). The first two objections to premium bonds are without logic and the third is trivial, but such points of human bias, familiar to the investment banker, may be the basis of at least minor economies in financing.

Sinking funds are also a matter of adjustment to market demands as well as of satisfactory corporate policy. In this respect, both the investment banker and the corporation, realizing the relative inability of the average investor to decide what a desirable standard should be, may make provision for an inadequate sinking fund. There is also the opposite danger of a too heavy concession to supposed need or market demands, resulting in a drain on cash needed for growth and improvement if the corporation is to hold its position in the industry and keep abreast of changing technology.

Timing of the offering is another detail upon which the advice of the investment banker, who is well-informed on the current and prospective market influences, should be valuable. Haste or delay may upon appropriate occasions result in economies or sometimes even determine the success or failure of a piece of financing.

2. *Continuing counsel.* An investment banker who floats securities for a corporation has a stake in the continued success of that company. Investors are inclined to judge a security merchant by the way in which his wares turn out. In the case of individual investors who are but moderately informed in such matters, all defaults count equally in destroying that prestige which is the basis

for any considerable success in the security business. More expert buyers, particularly of the institutional class, are better able to judge as to how far a failure could have been foreseen by shrewd financiers and how far it was the result of uncontrollable circumstances developing after the financing occurred. The desire to hold the esteem and goodwill of the financial community constitutes a powerful incentive to conservative practice for the better class of investment bankers. The prestige of a successful banker will, in turn, tend to reflect favorably upon the investment standing of those corporations whose financing he accepts.

One method by which the banker may continue to watch the affairs of the corporation is by representation upon the board of directors.[4] While he occupies a minority position as a rule, any advice he may give is likely to command respectful attention. In a case where the banker has acted as rescuer of the corporation under conditions of financial distress, he usually goes further and dominates the board, at least until conditions have materially improved.[5] Under conditions of normal growth and expansion such domination need not occur if the management has displayed ability to handle its affairs independently.

The degree of influence which the investment banker should have in shaping managerial policies raises the warmly controversial subject of "banker control." The banker has his own reputation to consider and is usually the only representative of the bondholders on the board of directors. Management, however, is apt to feel that its control should be complete. If a division of opinion develops, it is likely to emphasize natural differences in point of view and temperament. Conservatism is likely to color the financial point of view. To it, risks that may be created by expansion or innovation appear large. Management, representing the common stockholders' point of view, is likely to be more dynamic and venturesome. A business enterprise, to be vigorous and healthy, must be alert to meet changing conditions, but the point at which such an attitude passes over into an unhealthily speculative condition is a matter of judgment. Arguments over "banker control" are often a

[4] Banker representation is now most likely in the case of the more speculative type of offering, such as industrial common stocks, and least likely in the case of prime bond issues of public service corporations, The Public Utility Holding Company Act of 1935 prohibits officers and directors of banks (investment and commercial) from being officers or directors of registered utilities in which the bank holds a majority of the voting stock. The Clayton Act makes difficult interlocking directorates between banks and interstate carriers, since officers and directors of such carriers cannot receive any compensation, directly or indirectly, from the negotiation or sale of the carriers' securities.

[5] A common device for insuring control is the deposit of all or a majority of the voting securities in a voting trust, with representatives of the investment bankers controlling the board of trustees. See the discussion of reorganization, Chapter 28.

means of avoiding a more real issue of the wisdom of specific business policies over which differences of opinion exist. Allowance should be made for the resentment of operating officers whose influence or even position may be threatened by banker controls In cases where they are ousted because their speculative excesses have brought a corporation to failure, their protests should be discounted.

The criticisms against "banker control" are often vague attacks against "Wall Street influence." When criticism is specific and reasoned, it is directed against those situations in which investment banking interests have substantial control through stock ownership or holding company arrangements. The disadvantages of such control are (a) a possible tendency to use bonds and preferred, stocks to an excessive degree in order to keep the control of voting stock intact with a minimum investment, and (b) creation of an interest which may diverge from that of the security holders to whom the prior claim issues are sold. The first situation could be illustrated by those public utility holding companies which enabled investment banking interests to control huge property interests with a small investment in the common stock of the topmost holding company of the corporate pyramid. A strong incentive was present for excessive issue of bonds and preferred stocks not only of operating but also of the intermediate and topmost holding companies in order to assure control. This control assured the banker of the financing in an industry which was the largest single source of bond business during the 1920's. Where stock is owned for some ulterior end rather than as an investment, the policies of the corporation may cease to be conducted in a manner consistent with the long-run well-being of the enterprise. When the investment banker owns securities other than those he is offering his customers, the basis is laid for a possible divergence of interest between customer and banker, which is incompatible with the best standards of the business. This problem, which involves concentration of power without corresponding investment and a duality of interest likely to lead to abuses, has been faced by the Securities and Exchange Commission.

3. *Aid in time of stress.* In the past, important investment bankers that have enjoyed a close and profitable relationship with a

° For an early and spirited charge against "banker control," written from the point of view of an ousted promoter, see Arthur E. Stilwell, *Cannibals of Finance* (Chicago: Farnum Publishing Co., 1912). A statement entitled "American Wolves" is given in C. W. Gerstenberg, *Materials of Corporation Finance* (New York: Prentice-Hall, Inc., 5th ed., 1924) pp. 415-417. A later and mellowed account is found in Arthur E. Stilwell and James R. Crowell, "I Had a Hunch," a series of six articles in the *Saturday Evening Post,* December 3, 1927, to February 4, 1928. An account of Henry Ford's successful resistance to "banker control" in 1921 may be found in the *Commercial and Financial Chronicle,* July 30, 1921. A condensed account of the same is given in C. W. Gerstenberg, *Financial Organization and Management* (New York : Prentice-Hall, Inc., 2nd rev. ed., 1939), pp. 476-481.

corporation client have given special assistance, often in the form of loans, to meet emergency situations. Trouble is most likely to arise in a period of business depression or crisis, when maturing debts and lowered earnings threaten the client with insolvency. Such special assistance is given in the belief that the situation is temporary and does not indicate any fundamental weakness. Aid of this kind can be rendered with greater confidence by a financial institution that has intimately followed the affairs of the corporation for some years and has the incentive of preserving the standing of the securities it has sponsored with the public.

To be able to extend help, the investment banker must either possess considerable liquid resources or have affiliations with such resources at his command. With the passing of private commercial banking and the recent divorcement of investment banking from commercial banking, there is a question as to whether the investment banker of the future will be able to perform this function. The assets of investment banking are liquid, but the amounts of assets owned are generally small in relation to the size of the interests they serve and the volume of business they do.

Aid of the sort described has been extended more usually to railroads and public utilities than to industrials. The former classes of corporations have been consistent and frequent users of bonds in financing, and so the banker has not only the memory of past profits but the hope of future business. Another important consideration is that, where the need for funds is due to a temporary failure of earnings, the sums required to preserve solvency will be small in relation to the properties and securities involved. Thus, if there were a complete loss of earning power and the problem were to raise a sum for interest charges of 5 per cent on a funded debt equal to 60 per cent of the capital structure, the total required would amount to only 3 per cent of total assets. Even in the extreme depression of the early 1930's, the hard-hit railroads were able to show some earnings available for interest. In contrast; the industrials, with their narrower margin of net profit and more rapid capital turnover, often show a shrinkage in assets of serious proportions. There is also the greater uncertainty of the recovery of the individual industrial corporation from the storms of economic adversity.

The social importance of such emergency aid should be appreciated. The unnecessary failure of essentially sound corporations produces economic repercussions that deepen and prolong business depression. An atmosphere of pessimism and distrust is spread, preventing business revival. A crisis is an acute phase of • such a period, in' which lack of confidence has reached the point that doubts have arisen as to the solvency of financial institutions which have extended credit to business. The importance of meeting such a

condition, which is more than a matter of loss to a group of investors in a specific business, is demonstrated by the appeal for government support when the danger stage is reached. The loans of the Reconstruction Finance Corporation were important beyond the business directly assisted. In lending to commercial banks, the RFC was attempting to support confidence in banks generally. In lending to the railroads, to which it granted the largest group of loans made to any one industry, it was giving indirect support to the important financial institutions investing in railroad bonds. In the loans made to distressed mortgagors by the Home Owners' Loan Corporation and the Federal Farm Mortgage Corporation, indirect assistance was being directed to those universally used financial institutions which needed relief from liquidation pressure before the forces of confidence and business recovery could be made operative.

Advantages to the investors. Possible advantages to the investor in the interposition of the middleman banker between himself and the corporation lie in (1) the independent check upon the financial condition of the latter, (2) the insistence upon the inclusion of conventional protective provisions and legal covenants, (3) the maintenance of a market for the issue after initial flotation, (4) protection of investors by formation of a protective committee in the event of trouble, and (5) investment advice. The quality of these services will vary greatly, being very high in some instances and in others so poor as to be worse than valueless. The age and experience of the house and the caliber of its employees, the pressure of competition, the ethical standards of the management, and the character of the investors served, all will play a part in determining the quality and amount of the services rendered. On the average the service rendered to the individual investor of small means is the poorest, partly because such a person has the least ability to discriminate between sound and unsound advice, and partly because his business is in such small amounts that he is sought after chiefly by the vendor of the more risky securities, which give the banker a wider selling margin and the incentive to seek out smaller buyers.

1. *Checking financial condition.* A thorough and independent check upon the financial position of a corporation is impossible for all save the very largest investors if securities are offered directly, whereas the investment banker is able to spread the cost of an investigation over the whole issue. Auditors may be employed to verify the financial record. Appraisers may check upon the current value of the fixed assets. Engineers may study the plant and operating methods to determine their modernity and efficiency. Production, marketing, and administrative methods and labor and public relations may be looked into. Legal talent should examine

real property titles, patent rights, important contracts, especially those for a long period, and pending court actions.

2. Checking the security. Counsel for the investment banker will also see that suitable legal form is given to the investment contract, so that customary protective provisions and court-tested phraseology will be present. Proper action must be taken by the corporate officials to assure that the contract will be in accordance with charter provisions and bylaws and thus be properly binding. The advantage to the investor of having these activities performed by an investment banker with a suitably broad experience instead of by the interested corporation is clear.

The investment banker may not be genuinely disinterested, but may be an owner of stock in the corporation or tied to the flotation through some other affiliation, such as an interest in a construction company. In such a case the banker is in much the same position as a corporation attempting to sell its own securities. If a complete disclosure of the banker's interest is not made, the situation is much worse, for it amounts to a deception of the investor, who believes himself dealing with an independent middleman. Disclosure would be required for any issue registered with the Securities and Exchange Commission.

3. Maintaining the market. Once the security is sold, the banker is under no obligation to make a market for the issue, but he usually finds it desirable to do so, since it makes his offerings more attractive. In general, the smaller issues and those which are bought for permanent investment rather than speculation will see less active trading after distribution. Such securities are said to have a "thin" market; that is, there are infrequent bids and offers. Buyers and sellers are hard to locate. Those who have distributed the security are in the best position to discover possible buyers and sellers. They are also most likely to be well informed as to changes in the position of the corporation and conditions in the security markets which would change the market price. With these advantages and the desire to accommodate his customers so that his issues will not lose repute by unwarranted price declines or lack of marketability, we have the explanation of the assumption of this secondary function by the security merchant.

He may merely accept bids and offers from interested buyers and sellers and execute trades as bids and offers can be matched, or he may "take a position" in an issue—that is, buy for his own account to resell later. The latter may be necessary if a really worth-while market is to be made. This position is subject to abuse in that the banker, knowing his favored position to obtain bids and offers, may not take any supporting position and may only match buying and

selling orders when they offer him a very wide profit spread. Ostensibly he buys and sells for his own account, but actually he is performing only a brokerage function, since he assumes no dealer's risk and so obtains exorbitant compensation. This abuse is likely to occur only when a single banker has controlled the flotation of an issue, when only an inactive market exists, and when the customers are poorly informed on such matters.

When reselling requires sales effort and the development of new buyers for small and less well-known issues, it may cost more to dispose of securities that come back to the investment bankers than it did to sell the original issue. The effort is greater than that of merely locating an informed bidder and may be disproportionate to the gross profit received—first, because these individual sales do not lend themselves to the economies of mass selling as does a whole new issue and, second, because the dealer may accept a small compensation in order to satisfy the customer, who often thinks in terms of stock brokerage commissions, for which the selling effort is relatively small.

The task of the investment bankers is easiest in the case of large issues of well-known corporations widely distributed at the time of the original offering. Such issues tend to create a sufficiently wide-spread interest to arouse market activity. So important is the volume of activity in easing this work that the gross profit margin required to handle a somewhat speculative second-grade issue may actually be less than that for a higher-grade issue if the former for some reason, such as the size of the issue, is sufficiently more active to make the finding of bids and offers easier. This situation is the opposite of that which is ordinarily expected, because the gross profit margin usually varies directly with the degree of speculative risk in this secondary market, as it does in the case of original underwriting.

Among dealers this type of secondary market is called an "over-the-counter" market, as distinguished from the market that exists on the organized security markets, such as the New York Stock Exchange, the New York Curb Exchange, and the Chicago Stock Exchange. The work of these latter markets is discussed in the next chapter, where certain comparisons can be made. Their function is supplementary to the over-the-counter market. Although important corporate bond issues are generally listed for trading upon the exchanges and are bought and sold there, a considerable, if not the major, part of the activity will be found in the over-the-counter market. In some cases this trading expands to become an important and profitable branch of the larger investment bankers' business. Issues other than those sponsored by the particular house, such as the bonds of the Federal Government, are included in the trading,

and so those customers who are interested in market issues as well as new ones being offered by the banker can be given a broader service.

4. *Investor representation and protection.* If a corporation becomes insolvent, some arrangement must be made with creditors if complete collapse and liquidation is to be avoided. United action by security holders upon their own behalf is difficult. They are scattered and often unskilled in such matters. The cost of any very vigorous individual action is prohibitive even for a well-to-do and competent person. Because of attacks on investment banker representation, institutional security owners, such as life insurance companies, have come to play a larger part in initiating and directing such collective action when bonds of the type they hold are involved. If the issue was originally distributed by an investment banker, and if he possesses integrity, independence, and ability, no better representative could be obtained to offer constructive aid and defend the interests of the holders. Service in such a situation may help to preserve customer goodwill in spite of the financial loss. The work of protective committees in adjustments and reorganizations is discussed in Chapters 26 and 28.

5. *Investment information and advice.* Because the work of investment bankers keeps them in constant touch with the financial side of business and with the security markets, their customers frequently consult them in order to obtain investment information and advice. This aid is gratuitous and may be useful in building up goodwill. In its worst form this assistance may be merely a disguised form of sales propaganda to help the sale of the banker's own wares without regard to the requirements of the buyer. The quality of this investment advice offered to the public is partly a reflection of the conscience and integrity of the giver, and partly a matter of the skill of the personnel which renders the service.

Besides the danger of bad advice from the incompetent and irresponsible banker, allowance must be made for the temptations that confront even the most reputable members of this business. They face the general difficulty of every merchant who gives advice about the goods he deals in plus the special difficulty that it is much harder to measure the quality of securities than of more tangible goods and that it requires a much longer period to detect weaknesses. In more specific terms, the temptations are (1) to push those securities which show the greatest profit and are therefore likely to be those of more uncertain quality, because the choicer issues, which are also the easiest to sell, will show the narrower gross profit margins ; (2) to recommend the exchange of old securities with an established market into newer issues which the banker is currently selling in order to effect a sale rather than because the

switch is advantageous to the buyer; and (3) to recommend an undue concentration of funds in the particular kind of issues in which the house specializes most heavily. Merchants are very generally impressed with the merits of their own wares, and this bias, if reflected in investment recommendations, will produce improperly diversified lists, if not a kind of holdings actually unsuited to the needs of the particular investor in such matters as risk, marketability, and freedom from care.

Types of Banks and Banking Groups

Classes of investment bankers. Up to this point in our discussion, security merchants have been treated in the mass. They may be classified, however, according to the kind of securities sold and the number of functions performed. Houses tend to confine their activities to either the bond field or the common stock field. Differences in the types of buyers make such a division natural. The speculative character of common stocks strikes a note which is not in harmony with the air of conservatism that the vendor of bonds likes to create for his business. This bond house attitude is expressed in the following statement by J. P. Morgan in behalf of his firm, explaining why the four common stock issues handled by his house during the 1920's were distributed privately rather then by public offering:[7]

> However, as merchants of investment securities (i.e. bonds and occasionally preferred stocks) of established character, we do not consider that it is sound practice for us to offer common stock over our own name to the general public through banks and dealers. Consequently, in the few equity operations which we undertook, we invited to join us, not primarily institutions and dealers who distribute investment securities to the general public, but individuals capable of sharing and understanding the risk; and with one minor exception we asked them to join us in the stock purchase at the same price that we paid. It would not have been prudent banking to keep all these common stocks in our own portfolio. We wished, therefore, to sell part of them as a business man's investment to those having knowledge of business and general conditions, who would understand exactly what they were buying and who, as joint venturers, would share with ourselves the profit and the risk of the stock purchase.

Preferred stocks, more infrequent in number and importance than either bonds or common stocks, are sold sometimes by "bond" and sometimes by "stock" houses. The bulk of the security merchandising business is made up of bonds. Common stocks are frequently sold directly to existing stockholders, and in the past a substantial part of the common stock equity, especially in the case of industrial corporations, has arisen from retained profits.

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[7] Excerpt from the final statement by J. P. Morgan before the Senate Committee on Banking and Currency, June 9, 1933, "Stock Exchange Practices," 73rd Cong., 1st Sess., Part 2, p. 880.

Major bond houses find a substantial market for better-grade bonds in the so-called institutional market, which consists chiefly of life insurance companies, commercial banks, mutual savings banks, and trustees of estates. As a result of legal restrictions, state and Federal regulation, and tradition, these institutions invest mostly in public utility, railroad, governmental, and, in recent years, industrial bonds, and first mortgages on suitably improved real estate. Under our decentralized system of unit banks, often loosely regulated, there have been the greatest variations in the investment policy of our commercial banks. The less skillfully managed banks have been purchasers of credit obligations, such as the debenture and junior bonds of railroads and utilities, the bonds of industrial and financial corporations, foreign bonds, and real estate bonds. In general, the more highly rated low-yield bonds are sold to the institutional market, and the more speculative securities, offering the prospect of higher return, are sold to individual investors.

Common stocks are for the most part barred from the institutional market by their character. Hence, selling efforts are necessarily directed to the "individual" market, where a wide variety of personal standards permits the sale of all kinds of issues from the most conservative to the most speculative. Because the stock brokerage house, which executes orders on the exchanges, is in constant contact with a clientele of investors and speculators in equities, it is often associated with the stock branch of investment banking.

But the character of this business may be even more highly specialized. Some houses sell only a single variety of bonds or stocks, such as public utility bonds, real estate bonds, municipal bonds, or chain store stocks. Although it might be argued that such specialization makes for expertness, two factors exert a strong pressure to induce the banker to carry a wider line of securities. The first is the desire to expand and grow, a common characteristic of a successful business but one that frequently leads to diminishing returns; the second is the belief that familiarity with the group of security buyers who are already customers can be utilized more effectively by offering a more diversified list of suitable securities. The result of these two influences is a strong tendency for the bulk of large-scale financing to be concentrated in the hands of large houses which handle a variety of civil and corporate obligations, mostly bonds. Leading stock houses are likely either to be of smaller financial magnitude or to be noted chiefly for their brokerage business.[8]

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[8] For an account of a new investment banker who specializes in the issues of lesser established companies which are making their first offerings to the public, *see* "Ferdinand Eberstadt" in *Fortune,* April, 1939, p. 72. The article is of in-

Investment bankers are also classified as wholesalers, retailers, and "dealers," according to the type of functions or operations they perform. A wholesaler would investigate and acquire securities to be sold to other houses, which would dispose of them to the investing public. At the present time concerns which perform the wholesaling function generally participate in the distributing step, and there are only a limited number of "wholesale" houses. The house of J. P. Morgan and Company, before it restricted itself to the field of private commercial banking, was usually cited as the most notable example of a distinctly wholesale house.[9] The investment banker who, acquires bonds for his own account and risk, thus assuming the risks customarily associated with the ownership of inventory, and at the same time sells to the investor is a retailer. In its broad and general sense, dealers also are retailers, but in this field the term is applied only to those who acquire their offerings from other "originating" houses. Such a dealer is actually a retailer if he buys such securities for his own account and assumes a merchant's risks, but very often his purchases are made only as he succeeds in making sales to his own customers. He "sells from the list" of larger houses and receives a "dealer's" discount. In any other field of merchandising such a person would be thought of as a "sales representative" or "broker."

Investment banking functions. This brief statement of the three types of operators—wholesaler, retailer, and dealer—suggests the presence of several functions in investment banking which in the case of lesser issues may be performed by a single house but in the case of larger and more arduous flotations may be performed by different concerns or groups of concerns with a division of labor.

The four major functions of investment banking are purchasing, banking, risk carrying, and selling. Minor functions might also be mentioned, but they will be found to grow naturally from one of these four, which may be described briefly before indicating how they are sometimes the basis of specialized effort among investment bankers, especially where large issues are involved.

1. *Purchasing function.* The investment banker who initiates the financing is known as the originating house. The most impor-

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terest in that it notes a growing tendency for the major stockholders of relatively small closed industrial corporations to offer a portion of their holdings for public distribution. The motive of corporation financing is either minor or absent. The major reason lies in the advantages to these large stockholders in raising cash for their personal needs, diversifying their property holdings, and establishing a market value for the remainder of their holdings to avoid arbitrary valuations of their estates for death taxes.

[9]In 1935 certain partners and senior employees of J. P. Morgan & Co. and of Drexel & Co. withdrew to form Morgan, Stanley & Co., Inc., which is devoted exclusively to investment banking *Commercial and Financial Chronicle,* September 7, 1935, p. 1526.

tant work of the purchaser is to investigate the corporation offering its securities. This work will involve the employment of experts: accountants to audit and present statements that will accurately reflect the record and prospects of the company; engineers to examine the technical efficiency of operating plant and techniques; commercial researchers to study such matters as marketing, public relations, or labor policies, as they may be important; legal counsel to check on such matters as property titles, validity of patents, liability from possible law suits, legal soundness of various corporate acts, such as may be discovered by checking the corporate charter, bylaws, minutes of directors' meetings, and major contracts, and to prepare contracts incident to financing. The house that performs the work of investigation should have such expertness and prestige that, once the preliminary work of purchasing has been completed, it will be able to enlist the support of such other houses as may be necessary to carry the flotation through to success. The work of managing the successive steps will fall naturally to the originating house. As the result of its special position, the purchasing house will give such advice and aid as the corporation needs and will be expected to maintain a counseling relation after the financing.

2. *Banking function.* Once the purchase of securities has been agreed upon—that is, once a firm contract has been made that binds the banker to take the proposed issue, so that the corporation is assured of the funds sought—it is necessary to be able to raise cash to be paid over at the times agreed. If the issue moved smoothly and quickly from purchase to sale, the proceeds from sale might be available as soon as payments were due the corporation.[10] But the corporation must be assured of prompt payment without regard to the success of the sale. A period will ordinarily elapse during which the securities must be carried by the security merchants, and this operation may be termed the banking function. Either cash or credit must be available. Since the assets of the investment banker are usually limited as compared with the total of securities handled, the importance of this function and the desirability of ample credit lines are apparent. Slow-moving merchandise is as unwelcome to the investment banker as to any other merchant, and

[10] If the date of payment to the corporation follows the date of offering, the banker might even have the use of funds not due until later. This practice made it possible for certain real estate bond houses to continue afloat even after they had failed to distribute a part of their undertakings. Cash from newer issues was used to pay the banker's obligation to earlier issuers. When the process broke down, the more recent corporate debtors found a part of their bonds outstanding with the public but only a miscellany of unsalable bonds in the hands of the insolvent banker to cover their claim against him The current practice is to deliver the issuer's securities to the underwriter against cash payment.

the possibility of slow turnover will lead to a demand for a compensating larger profit margin.

3. *Risk-assuming function.* Since relatively quick resale is contemplated by the investment banker, his risk is not so much one of complete loss upon his commitment but rather one of failing to realize the price at which it was hoped the issue could be sold when the transaction was entered upon. Stocks fluctuate violently over very short periods of time. Bonds are more stable, but even they may vary in price within a few months, or even weeks, to an extent that will wipe out the relatively small gross margin that has become common in recent years. The bond market tends to move as a whole in sympathy with a changing outlook for credit or business conditions. If the bond market declines, the price of a new issue must be adjusted downward in order to bring it into line with the rest of the market. The risk of such changes makes speed essential in bringing the offering out for distribution once a contract has been made to buy an issue from the corporation at a definite price.

Ordinarily risk assumption will be associated with the "banking operation," and so the two functions are performed by the same party. They may be regarded as two aspects of ownership.[11] They can be separated in the investment banking process by having one group take over the issue and so provide the finances, while a simultaneously formed group agrees to purchase the issue from it at a fixed price to be paid as sales are effected but usually not later than some date before which complete distribution should be readily effected. The first performs distinctly a "banking" function and the second performs a "risk-taking" function. Where such a division of function is undertaken, the responsibility of the "risk taker" must be carefully studied, because the need to shift the "banking" problem to the risk taker, in the event the issue is not sold promptly, raises the question of his resources and credit. A reasonable explanation of this division of function and apparently excessive assumption of risk by the latter party in relation to his resources might be found in a sales ability that is out of proportion to his funds and credit lines.

The "banking" function might seem particularly appropriate for certain large financial institutions that are not interested in the

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[11] An ingenious device that illustrates how the ownership and risk may be separated is found in the sale with agreement to repurchase. Under this arrangement a bank might sell a United States bond to a Federal Reserve bank with an agreement to repurchase at the sale price at the end of a fixed period, such as 15 days. The buyer takes title and enjoys the income from accruing interest, but the risk of a value change remains with the vendor. In effect, the arrangement is a 100 per cent collateral loan. The practice of purchasing with agreement to resell was begun by the Federal Reserve banks during the World War and continued thereafter. R. B, Westerfield, *Money, Credit and Banking* (New York: Ronald Press Co., 1938), p. 629.

selling function. Life insurance companies have large means but have been forbidden to participate in underwriting activities since the Armstrong investigation of 1905 in New York (a leading state of incorporation and a center of financial activity) raised the question of the propriety of a fiduciary institution assuming such hazards. Such operations opened the way for financial groups to use funds entrusted by millions of small policyholders in a manner that was considered improper in view of the conservative investment policies necessary to fulfill their central objective of safe insurance. Since the Banking Act of 1933, commercial banks have been obliged to give up their interest in the investment banking business, except for municipal bonds, even being forbidden to conduct it through a separately organized security affiliate.[12]

A few ventures have been made into this field by certain of the "investment trusts," an activity which may expand where the corporate charters give permission to engage in this field. Although "trusts" in name, they actually have large sums held for permanent investment, a major portion of which is very generally committed to common stocks. Such institutions would be financially able to engage funds or credit to perform the "banking" function just discussed. Some will be inclined to question the wisdom of an "investment company" undertaking such operations. When those who put their money into the company understand and authorize such activities, they would not appear inappropriate, provided the undertaking in any given transaction is kept in reasonable relation to the resources of the company.[13]

4. *Selling function.* The nature of the selling function requires no especial explanation. The amount of effort, and therefore the

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" The rapid rise of commercial banks' security affiliates to importance may be judged from the fact that they accounted for over one half of the originations and participations in 1930, as compared with 12.8 per cent of originations and 20.6 per cent of participations in 1927. S. L. Osterweis, "Security Affiliates and Security Operations of Commercial Banks," *Harvard Business Review,* October, 1932, p. 126. The commercial bank seemed well situated to distribute bonds, but the arguments against such activity prevailed. The bank might switch frozen loans to its affiliate; security selling might reduce public confidence in banking activities; the bank might be influenced to purchase unwisely for its own account, for trust accounts, or for correspondent banks; and the affiliate might become an unhealthy connection for concealing undesirable assets. Morgan, Stanley & Co., in a memorandum to the Securities and Exchange Commission suggesting changes in the Federal law, recommended that commercial banks be permitted to participate in underwritings but not to sell securities in the retail field. *New York Times,* August 11, 1938, p. 29.

"In 1938 the Tri-Continental Corporation and Selected Industries, Inc. formed a new concern, Union Securities Corp., with $1,000,000 cash and $4,000,000 more subscribed, to engage in underwriting. It was stated that the new company would not be used to absorb remainders of issues the public had refused to buy. This type of undertaking has been standard practice in England for many years. Issues are often "sticky" not because they are unsound but because of sudden market upsets. *Time,* October 17, 1938.

cost, will vary greatly, depending upon the type of security and the time of sale. High-grade bonds that can be sold in large blocks to institutional buyers will require small effort, and the gross profit on some issues of the highest-quality civil obligations have scarcely exceeded a broker's commission. When the securities must be sold to individuals and in small blocks, or the investment markets are slow, the selling problem is correspondingly a difficult one.

Division of functions in practice. The simplest arrangement and one which would be suitable either for small or for very readily salable issues carrying slight merchandising risk would be for a single house to originate and carry through the sale. This method could permit some division of function by allowing independent dealers a concession in price or a commission for making sales. Rather than attempt to describe all the possible variations of practice, it will suffice for our purpose to go immediately to the opposite extreme of complexity and outline the most elaborate arrangement for the largest and most difficult flotations, simply noting that divisions of function can be eliminated in situations of an intermediate character wherever desirable.

1. *Origination.* The work of investigation and formulation of a contract for the handling of a piece of financing will be conducted by an investment banker known as the *originating house.* When the study of the situation may involve time and expense, this house may enter into a contract with the corporation giving it an option to purchase the issue if the results of the study are favorable. Once a decision to go forward with the financing has been reached, a contract governing the corporation's relation with the investment banker must be drawn. The chief points covered will be the following:

(a) Terms of sale. The price at which the issue is to be sold to the bankers, the time of payment, and a description of the securities will be set forth.

(b) Allocation of expenses. A statement will be made as to whether certain expenses will be borne by the corporation or by the banker. The corporation may, for example, bear the expenses of an independent audit of its accounts, legal fees, and the expense of registering the issue with the Securities and Exchange Commission and any state securities commissions having jurisdiction. Any such expenses borne directly by the corporation must be added to the compensation of the investment banker in measuring the total cost of financing.

(c) Future relationship between the corporation and the banker. The corporation may give the banker an option upon future financing. Such options are no longer likely in either the utility or railway fields but are not unusual in the financing of smaller industrial

corporations. An agreement of this kind might merely bind the company to give the banker the first opportunity to buy later issues, other than those offered to stockholders by privileged subscription, on terms as favorable as offered to any other parties. Since the banker who has once investigated the corporation and has a continuing interest in its finances should be able to give later business a maximum of understanding with a minimum of expense, this arrangement would seem suitable. Once a corporation's securities have been widely distributed, they should be easier to sell on a subsequent occasion. Sometimes, however, this option has been so phrased as to give the banker a strangle hold on later financing even though the terms demanded by him might be onerous.

It may also be agreed that the banker shall have representation upon the board of directors in order to give voice to the financial and investor point of view, provided such practice does not run counter to legal prohibitions.

(d) *Protection of the investor.* Various covenants may be included which will tend to protect the investor, particularly of the type that may not suitably be included in the security indenture itself. Important officers who have been identified with the success of the corporation may agree to continue their services for a definite period, and limitations to their compensation may be stipulated. Suitable audited annual, or more frequent, financial and operating reports may be agreed upon.

2. *Purchasing syndicate.* The originating house may wish to and nowadays does divide the responsibility and liability as soon as a contract for the purchase of securities with the issuing corporation is ready.[14] To do this the whole deal is entered into at once by a group of bankers known as the *purchase syndicate.* The advantage of reduced liability is the most obvious point to this step. But, by the association with other similar houses, the issue is assured of more rapid and wider distribution. The services of all the satellite dealers of each syndicate member are enlisted to bring the issue to a larger customer list. Furthermore, the granting of the privilege of participation to other originating houses should result in reciprocal favors from them and so give the banker more diversified offerings for his own customers, which should be productive of both goodwill and profits.

While a purchase syndicate will ordinarily get the issue at the net price to be paid to the corporation, a part of the gross margin, usually a small one, may be allotted to the originating house. Other

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"A syndicate of 112 underwriters, the largest ever formed for an industrial bond issue, was formed to acquire the $105,000,000 of Bethlehem Steel Corporation's bonds, consisting of an issue of serial debenture notes and two series of mortgage bonds. *New York Times,* February 25, 1940.

deductions from the gross profit may result from any direct expenses incurred at this stage of operations and any payments to promoters who have brought the financing to the originating house. Although the purchase is made by the group as a joint venture, the originating house is likely to have handled all the arrangements incident to purchase and to act as the manager of later operations.

3. Banking syndicate. Formerly, those who participated in the purchasing might wish to reduce the responsibility for carrying the securities by passing it on to an enlarged syndicate. Those parties that were added to the membership of this latter syndicate might have no other function than to supply additional resources for the easier financing of the issue should some delay in distribution arise and might have no part in the subsequent selling process. Such parties might have been permitted to acquire the securities with their own cash or have had sufficient credit standing to enable them to carry the securities with the aid of bank credit. This financial function is particularly important whenever there is the possibility of some delay between purchase and final distribution of the issue.

Since the Federal securities law makes no provision for "sub= underwriting," the customary current practice is for all who are sharing the underwriting and risk to join in the original purchase contract.

4. Selling the issue. In the final step of selling, the participation of the largest group is essential if the issue is to receive wide distribution, which is regarded as one of the special advantages of sale through investment banking channels. The most common present practice is for members of the syndicate to sell the securities they have underwritten through their own organization and through dealers, who receive a stipulated discount but who take down securities only as they sell and pay for them.

Two methods of carrying the liability might be mentioned. (1) A syndicate may be for undivided account—that is, unlimited liability—which means a joint venture, with the liabilities resembling those attaching to membership in a general partnership. The participations, or shares, would be stated as percentages, but in the event that any securities were unsold or had to be disposed of at a loss, the unsold securities or the net loss would be cared for by each participant according to his prearranged share in the venture, regardless of how much of the issue he might have sold by his own efforts. (2) In a divided account, or limited liability, syndicate each participant has a stated fractional interest in the venture but is obliged to take up only the difference between the amount of his participation and the amount he has sold. Other participants will sometimes dispose of more than their allotted shares, so that those who fail to sell their allotments may nevertheless not be obliged to

take over any unsold securities. Since the flotation is not a success until the whole issue is sold, it may be impractical to use the divided account and force the unsold remainder upon those participants who for one reason or another have had trouble in selling their shares. The better course may be to sell the remainder wherever possible and with the least loss to the group. If the weakness becomes chronic, the houses that characteristically have trouble in caring for their shares are likely to have their participations reduced in later offerings.

A third form of selling arrangement sometimes used is known as a *selling "group."* That term is employed in a special sense to distinguish this arrangement from the syndicates just described. The members form no syndicate and assume no responsibility. They are merely expected to make their best efforts to sell their allotments. If they decide to buy any of the allotted bonds for their own accounts, they are bound not to dispose of them during the selling period for less than the agreed price. This "group" method grew out of the expansion of small dealer organizations after the War and the realization by large originating houses of the impracticality of enforcing liability of these dealers for failure to sell small balances of their participations.[15] The selling group makes it possible to bring together a large number of selling organizations not necessarily strong financially and requires the backing of a syndicate to insure the deal if the market fails to absorb the issue rapidly.

Recent Tendencies in Investment Banking

Changes in investment banking functions. Certain changes have appeared in the division of functions since the passage of the Securities Act of 1933 and its amendment by the Securities Ex change Act of 1934. Those houses which are joining in the underwriting now sign the purchase contract with the issuer, whereas formerly only the originating house signed. This practice spreads responsibility as soon as liability of any sort begins and avoids the problem of "subunderwriting."

When the first underwriting began under the Federal securities laws, the uncertainties of the times and the law led to the use of a hedge clause, which permitted termination of the underwriting agreement if any substantial change "in the existing operating, political, economic, or *market* conditions shall have taken place." This qualifying clause was ordinarily effective to the date of public

"Dewing states: ". . after 1926, the originating houses forsook their adherence to the fiction of a liability among the multitude of cooperating dealers and secured the actual underwriting through a small New York banking syndicate." A. S. Dewing, *Financial Policy of Corporations* (New York: Ronald Press Company, 3d rev. ed., 1934), p. 985.

offering. If it ran beyond that date, as it sometimes did, it practically nullified the underwriting agreement. Under more normal conditions a hedge clause is unusual.

The members of the purchasing syndicate retail a higher proportion of their participations than they formerly did, because a larger number of houses are included. The trading account, established to stabilize the market during distribution, is more often absent and, when present, is less active than in the past.

Cost of investment banking service. The difference between the price paid by the buyer and the amount received by the issuing corporation is known as the *gross margin* or *gross spread.* Available data indicate that gross spreads have decreased considerably in recent years. From 1920 to 1931 the average gross spread on all issues of domestic railroad bonds was slightly less than 3 per cent of par value; that on foreign bonds sold in the United States averaged 5.3 per cent of par. For 65 domestic corporate bond issues of $3,000,000 or more offered during 1928, gross spreads varied between 1.8 per, cent and 8 per cent of the public offering price; the average was 4.3 per cent, and over 80 per cent had spreads of more than 2.7 per cent. The gross spreads on a sample of preferred stock issues of $2,000,000 or more floated in 1929 averaged about 5 per cent of the public offering price.[18]

Since 1933, gross spreads have declined materially. For the bond issues of $5,000,000 or more that were registered with the Securities and Exchange Commission, the spreads diminished from an average of 3.7 per cent of face value in the period July 1, 1933, to December 31, 1934, to 2.13 per cent in the period July 1, 1936, to September 30, 1936.[17] The spreads on 18 preferred stock issues sold in 1935 and 1936 averaged 4.25 per cent of offering price. The two most important reasons for the decline are (1) the generally higher quality of the issues, and (2) the pressure of conservative funds seeking investment as against a very small supply of new financing (sellers' market). A definite relationship exists between yields on new bond issues and spreads—the lower the yield, the smaller is the gross profit margin.'[8]

It cannot be too strongly stressed that these margins between the price paid the corporation and the selling price of a security are gross and do not indicate the extent of the net gain made by the

" Paul P. Gourrich, "Investment Banking Methods Prior to and Since, the Securities Act of 1933," *Law and Contemporary Problems,* January, 1937, pp. 44-71, especially pp. 54-59.

" *Ibid.* A spread of 21 per cent (or 21 points) might be divided as follows: originating house, I point; underwriting groups, I point; and retailers, 11 points. "In the New Wall Street," *Fortune,* October, 1935, p. 116. This article describes the rise and Operations of the First Boston Corporation, a prominent investment bank.

" See Gourrich, *op. cit.,* p. 70, for a table showing this correlation.

bankers after expenses. With the slender gross margins more and more common in recent years, a bond market decline may wipe out not only the net profit but leave a loss before gross profit. Failures are not advertised, but they may be guessed from the extension of the life of syndicates and the action of the bond market, No catastrophic setback is required to produce such a condition. An example of a congested bond market occurred in the middle of 1927 after a number of prominent issues, including the Erie Railroad refunding and improvement 5's, Hudson Coal 5's, Goodyear Tire & Rubber 5's, Humble Oil 5's, Phillips Petroleum Shell Union Oil 5's, Brooklyn & Manhattan 6's, Budapest 6's, and various other Central European and South and Central American government and corporation issues failed to hold at the offering price.[19] The market did not prove receptive to the flood of new issues, and the results were undoubtedly costly to the bankers. The purchase of the Dodge automobile manufacturing properties from an estate and the sale of the resulting medley of corporate securities to the public received especially wide publicity as an example of investment banking profits. In view of the subsequent decline in Dodge securities, it is possible that the profits were not realized.

The gross spread on very speculative stock issues may amount to as much as one third of the offering price. In such a case, the proceeds to the company are so reduced that there is a serious question as to whether enough can be earned on the net proceeds to pay a reasonable return on the amount committed by the investors.

Sometimes, particularly in the case of stock flotations, bankers have received common stock as a part of their compensation. When such stock is retained by the banker, the possibility of a conflict of interest arises if the securities sold the public are of a different class. Thus, in a reorganization, stockholders might not see eye to eye with the bondholders. The retention of a common stock interest in a corporation may, however, be thought of as giving the bankers a subordinated stake in the prosperity of the company that should augur well for other investors in prior issues who have less means of following corporate affairs and exercising an influence on policies.

On infrequent occasions the bankers may receive as partial compensation an option to purchase common stock of the corporation, generally at a higher price than exists at the time the contract is

[19] A recent example is found in the $44,244,300 Pure Oil Company 5 per cent preferred stock offered in August, 1937, to stockholders at par ($100) but underwritten by a syndicate headed by Edward B. Smith & Co. Stockholders took up about 8,000 shares, and a few more were made available to persons who had sold short and were unable to make delivery otherwise. The unsold shares were delivered to the underwriters at the end of October. In March, 1938, dissolution of the syndicate was announced. At that time the stock was quoted in the over-the-counter market at from 72 to 73. *Commercial & Financial Chronicle,* March 12, 1938, p. 1725.

drawn. This option gives a call on future prosperity of the corporation and requires that the market price advance over the stipulated sale price to give it value.[20] The issue of additional stock in this way is not inappropriate when the company is likely to be able to use the resulting cash for expansion purposes or the retirement of prior securities. Such an option should be limited to not more than a few years, so that the company may be certain that the funds will come within a period when they can reasonably predict a probable need.[21]

Bankers as selling agents. In March, 1935, a bond market tradition was broken by the marketing of a $43,000,000 issue of Swift and Company bonds (31's of 1950) on a commission basis of four tenths of one per cent. The banker served solely as a selling agent instead of supplying the conventional service as risk-assuming merchant. In the autumn of the same year the Socony-Vacuum Corporation sold a $50,000,000 3i per cent issue on the same basis. The latter issue was refunded with an issue of 3's on June 22, 1939, in the same manner. Only such supersolvent corporations as these two are likely to employ this method of raising funds voluntarily. In both of these cases the working capital position and general financial strength would have warranted recourse to bank loans if any untoward event had interfered with the sale of the bonds. The exceptional ease of the commercial paper market at the time would have made such an alternative practical.

On the other hand, small speculative concerns still in the promotional stage are generally obliged to use selling agents because they are unable to obtain a firm underwriting by responsible investment bankers. Mining ventures, which are commonly accompanied by a high degree of risk, often fall in this class. As a result, both the corporation and the buyer of securities suffer the added hazard of seeing insufficient funds raised to bring the enterprise to an operating basis.[22] Under such circumstances, houses with a reputation to lose are unlikely to be willing to be associated with the financing, although occasionally a stock house might undertake such a venture

[20] Technically, this option has an immediate value dependent upon the level to which the stock is likely to rise and the period likely to elapse before realization. In the absence of a market for such options, this value can be realized only after the stock has risen in market value above the price at which the option may be exercised.

[1] A post-SEC example is afforded by the option given the bankers in April, 1937, when they underwrote the sale of 204,000 shares of United Electric Coal Companies offered to stockholders at $5.50. Underwriters were to receive a commission of 50 cents per share and an option to purchase not more than 50,000 additional shares at $8.00, good for two years. *Commercial & Financial Chronicle,* April 17, 1937, p. 2679,

22 To protect investors against this contingency an agreement might be made to place in escrow all funds received and to release them to the corporation only after the full amount needed had been collected.

if it felt strongly about the attractiveness of the undertaking and was fairly confident it could raise all the needed funds. [23]

Bankers as underwriters. In its narrower and original meaning, underwriting refers to insurance. The term stems back to the beginnings of English marine insurance, when individual risk takers sitting about Lloyd's Coffee House wrote their names under the contract for the amount of the risk they wished to assume for a ship about to embark on a voyage. Insurance companies still speak of their business as underwriting. Usage has extended the term to include the work of the investment banker although the bulk of his business is that of a merchant rather than an insurer. On some occasions, however, the banker guarantees the success of issues which he does not buy or distribute. In such cases he is an underwriter in the strictest sense of the word.

Established corporations usually offer new issues of common stock or securities convertible into common stock to those who are already stockholders. [24] The price set is lower than the going market price, so that any owner not wishing to exercise his privilege can find a buyer who will be willing to purchase the right. Should the increased supply of the security or a decline in the stock market eliminate this differential between offering and market price and so cause the sale to fall short of complete success, the corporation might be embarrassed. Hence it is not uncommon for a corporation to pay a premium or commission to an investment banker to underwrite the success of the issue. The banker contracts to purchase any part of the issue not sold, taking such securities on the terms offered to the privileged subscribers.

Another purpose for which underwriting might be used would be to effect safely a conversion of a convertible bond or preferred stock issue into common at a time when the market was favorable. Let us suppose that a bond issue was convertible into common at the rate of $50 of par value of bonds for one share of common and that the latter was selling at $60. At that figure the bonds should be selling for around 120, even though they were callable at 105. However, the bonds are not being converted because the common dividends are less than the interest payable on a corresponding amount of bonds. Such a situation might easily arise where the common had bright prospects or the market was bullish. The management would ordinarily let such a situation develop as it might. But they might decide that the corporation would be benefited by

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For the period January 1, 1936, to June 30, 1938, approximately $1,070,000,000, or 15 per cent of all registered securities offered for cash sale, was proposed for sale through agents, including investment banks Securities and Exchange Commission, *Selected Statistics on Securities and on Exchange Markets* (Washington, August, 1939), p. 31.

[24] Discussed more fully in Chapter 16.

conversion either because they feared untoward business conditions in the future that would make an elimination of bonds a safety measure or because they had a plan for new financing that would be facilitated by that step. A notice that the company was to redeem the bonds at the call price would force the holders to convert their bonds in order to preserve their profit. Failure to convert would mean the receipt of $1050 for a $1000 bond that could be converted into 20 shares of common worth $1200. The risk to the corporation in issuing a call would lie in a possible subsequent decline in the market price of the common to 522, at which point conversion would cease to be profitable and the problem would arise of raising money to pay the called bonds. Insurance against this

TABLE 26

ESTIMATED GROSS PROCEEDS OF TOTAL CORPORATE BONDS OFFERED AND AMOUNTS OFFERED PRIVATELY 1934-1938

(dollars in millions)

	Total	*Amount Privately Offered*	*Percentage Privately Placed*
1934	$ 515	$ 100	19.4
1935	2,572	364	14.1
1936	4,255	443	10.4
1937	1,713	447	26.1
1938 (to June 30)...	700	199	28.4
	$9,755	$1,553	15.9

Source: Securities and Exchange Commission, *Selected Statistics on Securities and on Exchange Markets* (Washington, August, 1939), p. 46.

eventuality might be obtained by an underwriting agreement whereby bankers would agree to purchase stock to supply funds for such bonds as were presented for cash redemption.

Direct, or private, sale. Probably no recent development has given more concern to the investment banking fraternity than the growth of direct selling, or the private sale. Corporations have negotiated the sale of whole bond issues directly with one or a small number of life insurance companies.[25] The importance of this tendency can be judged from the figures given in Table 26.

The corporation officers have had three main reasons for switching from the ordinary investment banking channels to the private

25 Churchill Rogers, "Purchase by Life Insurance Companies of Securities Privately Offered," *Harvard Law Review,* March, 1939, pp. 773-791. The Securities and Exchange Commission has estimated that from January, 1934, to June, 1938, approximately 83 per cent of securities privately offered were purchased by life insurance companies. Securities and Exchange Commission, *op. cit.,* p. 48.

sale. In the first place, the uncertainty which results from going through the registration formalities with the SEC and then the 20-day waiting, or "incubation," period is a hazard for the corporation.[26] The underwriting agreement with the issuer is not usually signed until 1 to 3 days before the date of offering. Untoward security market events may prove fatal to a successful flotation during this period. Secondly, the corporation sees an opportunity to save certain costs—the investment bankers' compensation, which, even though a small percentage, reaches a considerable sum on the larger issues, and the expenses involved in registration of a publicly sold issue, and to avoid the work, and the possible liability of officers and directors, incurred in registration. The third favoring circumstance has been a market in which bond issues were scarce and institutional buyers were eager to invest idle funds. Life insurance companies with individual resources in excess of a billion dollars are able to absorb whole issues without breaking the rule of sound investment diversification.[27]

The investment bankers have been quick to point out the general advantages of their services, which have been mentioned earlier in this chapter. They have stressed the absence of market standing for privately placed issues. This lack might react to the disadvantage of later financing in a less favorable market. The corporation will also be almost certainly obliged to retire any portion of such debt at the full call price. No open market purchases at a possible discount will be available. In view of the low coupons on most of the current bond issues, this possibility may be worth more to a corporation than the small cost of using the investment banker to insure a wider market. This point has more force for the industrial corporation than for the public utility, because the former uses a sinking fund more often, and the more varying fortunes of the industrial makes occasional bargain purchases more probable over the life of a bond issue.

The argument has also been advanced that, since the buyers representing the large life insurance companies deal in such matters all the time, they are shrewder bargainers than are corporation officials, for whom financing is an infrequent matter. The conclusion is drawn that the buyer is likely to absorb most of, or even more than, the advantage of the costs eliminated by direct selling. No final judgment can be reached upon this point. In fact, others have even argued that the eagerness of such buyers has, in some

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"Investment bankers have urged the reduction of the waiting period. See the memorandum cited in fcotnote 12.

[27] Many issues have been absorbed by a single company. The record-breaking $114,500,000 of first mortgage 31's of the Commonwealth Edison Company (1939) was taken by a group of fourteen insurance companies; the $75,000,000 of Socony-Vacuum Oil Corporation as (1937) was taken by five companies.

instances, led to their paying more than they would have if the price had been set by an investment banker concerned with the market success of the issue.

Aside from the investment bankers, two other parties are likely to be critical of the practice of private sale. The Securities and Exchange Commission may be hostile to a development that reduces the scope of its activity, even though specific exemption is found in the act. However, the protection of these major investment institutions, with their expert staffs, by a government commission seems hardly necessary. Other objectors may be smaller insurance companies and similar conservative investors, who find they are eliminated from participation in an important part of the best bond issues.

The need for suitable investments by insurance companies has caused them to push their search for even smaller loans. In such cases the investment banker, or his equivalent, sometimes enters the field to perform the function of brokerage. A suggestive parallel can be found in the common practice of life insurance companies making and servicing their mortgage loans through local real estate or other loan agencies.

Criticisms of Investment Banking Standards

This chapter merely covers briefly the operations and functions of the investment banker that are necessary for the understanding of the work of corporate financing. Those interested in the specialized problems of the business will turn to the specialized treaties devoted to this branch of finance.[28] Various socio-economic questions might be discussed here if space permitted. A few of these have been widely aired as a result of the charges made against investment bankers during the depression of the early 1930's, and they have an indirect interest for businessmen who deal with them.

Sale of weak issues. One charge is that the bankers are so delinquent in permitting bad securities to be distributed that the result is tantamount to fraud even though within the law. Attention is usually centered upon certain spectacular failures. In corporation finance, the Kreuger and Toll issues and the collapse of

[28] Such works as the following may be consulted: L. Chamberlain, *The Work of the Bond House* (New York : Moody's Magazine Book Dept., 1913) ; Arthur Galston, *Security Syndicate Operations* (New York : Ronald Press Co., rev. ed., 1928) ; H. P. Willis and J. I. Bogen, *Investment Banking* (New York: Harper & Bros., rev. ed., 1936).

Such problems as the prevention of price cutting by dealers in a new issue and the sale of new securities before the official offering date, known as "beating the gun;' are matters of trade practice chiefly of concern to bankers. A statement of fair trade practices may be found in the Rules of Fair-Practice of the National Association of Securities Dealers, Inc.

the holding companies that capped the Insull utility empire, and, in civil finance, foreign bonds, especially certain of the South American issues, are held up as horrible examples. The adventurous Ivar Kreuger gathered match monopolies from needy governments for cash and loans. By surrounding the affairs of his companies with an aura of mystery, he concealed his speculations with funds from the investment bankers who sold the securities. Such secrecy was claimed to be essential for the success of his diplomatic negotiations, which involved delicate political situations.[29] The topmost Insull holding companies, which were formed in the last stages of the 1929 boom, undertook debt financing, including heavy bank loans, in spite of their highly pyramided character. As a result of the gradual diversion of substantially all the assets to serve as collateral for commercial bank loans, the bonds and other securities issued to the public but a short time before became virtually valueless. The crash was the most disastrous in this field.[30] Senatorial investigation of foreign government loans gave wide publicity to bribery by investment bankers and repeated bond flotations even after proceeds from earlier bonds ostensibly raised for public improvements had been diverted for military purposes.[31] Less spectacular individually but more imposing in total was the almost complete failure of the numerous real estate bond flotations based upon large apartments, office buildings, hotels, and motion picture palaces.[32] This type of bond was chiefly sold by houses that specialized exclusively in this one branch of the business.

No excuse can be offered or should be attempted for fraud, but two cautions must be uttered for those who would make any judicious appraisal of investment banking as an institution. The first is the need to distinguish between fraud and bad judgment. Although a particular piece of financing may appear inconceivably inept in the light of after events, it may be the result of incompetence or inadequate foresight. Many weak situations are inevitably smashed when unexpected business depression cracks down. The second is the need to keep the whole picture in perspective rather than to allow attention to be fastened upon isolated cases. An example of an attempt to measure results in this broader man-

29 See Hearings Before Subcommittee of the Committee on Banking and Currency, U. S. Senate, "Stock Exchange Practices," 72nd Cong., 2nd Sess., Part 4 (January 11 and 12, 1933).

" *Ibid.,* Part 5 (February 15-17, 1933).

" Hearings Before the Committee on Banking and Currency, U. S. Senate, "Sale of Foreign Bonds or Securities in the U. S.," 72nd Cong., 1st Sess., Parts 1-4.

" The gross overconstruction made inevitable the failure of issues of even soundly conceived buildings in the resulting competition for tenants through excessive vacancies.

ner and by an objective standard is found in the study of performance of the flotations of a group of leading originating houses.[33]

Even statistical measures must be read with care. How far should the stress of an unusual depression be regarded as a mitigating circumstance in the reading of failures? Or, in comparing bankers, should not allowances be made for differences in the type of securities handled? Railroad bonds made an unexpectedly poor showing and utility bonds made an unusually excellent record during the decline from 1929 to 1933. An issuing house might have been more heavily interested in the latter class of bonds largely through the chance of specialization rather than any clairvoyant knowledge.

Inadequate financing facilities. As opposed to the criticism that investment bankers are too lax, business interests wishing to raise money are inclined to berate them as excessively conservative. This contradictory complaint is less publicly known but should be kept in mind Just as the investor, in his desire to find someone to blame for his losses, overlooks the difficulties of the banker, so the businessman seeking funds is either unaware of or inclined to gloss over the weaknesses of his own position. A business may be too greatly dependent upon one or two persons and so too impermanent to justify offering long-term securities for general public participation; managerial personnel may be weak; or the business may be in a line in which investors are currently loath to participate.

Excessive power of bankers. A third major charge against investment banking is that bankers demand and obtain undue influence in the control of corporations by their power to bring funds to a needy enterprise. At times the evidence borders on the fanciful. The mere presence of a banker's representative on a board of directors is magnified into proof of "banker control," and the corporation is immediately pictured as in the clutches of the octopus called Wall Street. Some politicians are especially prone to advertise this type of "proof." The function of such representation of an indirect sort for investors has already been explained. Able management is glad to have the board include someone competent to give counsel on the financial side of the business. Association with powerful and able investment bankers may even have prestige value in establishing the credit standing of the corporation's securities.

When a corporation has drifted into financial troubles, the investment baner who is willing to furnish funds may thereby be in a position to obtain and exercise control if he chooses. And the will

[33] "Terris Moore, "Security Affiliate Versus Private Investment Banker," *Harvard Business Review,* July, 1934, pp. 478-484.

See also the testimony of the members of J. P. Morgan and Co., Hearings before the Committee on Banking and Currency, U. S. Senate, "Stock Exchange Practices," 73rd Cong., 1st Sess., Part 1 (May 23-25, 1933).

to obtain power is as strong with bankers as with others. However, where distress financing is involved, the implication is strong that the management has failed in the handling of its affairs. Capable operating officials may be poor financiers. In such a case a banker would be merely opening the way for a recurrence of troubles if he supplied the funds to the business without obtaining the power to check unsound policies. The loud complaints of an ousted management must be weighed against possibilities of rash policies of overexpansion or excessive use of credit. In passing, we should note that the opposite charge of collusion is sometimes made when bankers continue operating management after a financial failure, although the obvious answer may be that no better personnel could be obtained, the failure being largely explicable in terms of uncontrollable external factors or a single fatal error in policy that did not indicate lack of fitness for meeting run-of-the-mine operating problems in a competent manner.

In view of the difficulty with which the scattered security holders of the present-day large American corporation are able to, exercise any effective control over management, the threat of banker control and possible expulsion may well be a salutary influence, to prevent excesses by officers. Management is made to feel that the path of virtue in the conduct of their financing is a desirable road to follow. Investment banker control has its favorable side where its purpose is to obtain sound financing and efficient operating officers and not merely to get lucrative business for the banker As long as there is a reasonable degree of competition among security houses, they are likely to be willing to undertake financing without an undue seizure of power if the business is able to show a sound condition and the ability to handle its own problems.

Inadequacy of competition; competitive bidding. The qualification with respect to competition just mentioned brings us naturally to the charge sometimes made that investment bankers do not engage in effective competition. A possible reason for this allegation may be found in the cooperation of bankers in underwriting activity. Again, it may seem like collusive action when they refuse with unanimity to undertake a piece of financing, although such a refusal may show merely a common belief in the excessive hazards or unmarketability of the offering. The refusal to engage in competitive bidding for corporate security issues is also regarded as incriminating evidence by some.

Investment bankers have purchased United States Treasury bills, state and municipal obligations, and railroad equipment trust certificates by submitting sealed competitive bids. The method is satisfactory where the purchase is of a standardized article or one requiring no special knowledge. For this reason, the arguments for

competitive bidding are not made for industrial financing. They are urged for the regulated utilities and railroads.

Competitive bidding in the railroad field dates back to 1926, when the practice was adopted for equipment trust certificates at the instance of the Interstate Commerce Commission.[34] Early in 1939, the Cincinnati Union Terminal Co. obtained a competitive bid on a $12,000,000 refunding operation, making the subject one of warm interest among investment bankers.

Massachusetts has required that its gas and electric utilities obtain competitive bids on all first mortgage bond issues in excess of a specified amount and beyond certain short maturities. The Public Service Commission of New Hampshire has frequently ordered its public utilities to use open bidding. This practice has also been followed in other states. The New England states and the District of Columbia may be said to have taken the lead in this respect.

The chief argument for competitive bidding is that it should enable the corporation to obtain the highest possible price for its bonds and so reduce its interest cost to a minimum. While this additional sum may come from a shrinkage in the investment banker's gross margin, it is possible that the major part may come from higher prices to the investor.[35] A second argument is that it would tend to sever the intimate relation between banker and corporation and so end "banker control."

The main arguments against competitive bidding are the following:[36]

1. The intimate and continuing relationship between banker and corporation are destroyed, and the corporation loses the services which financial expertness may give. Continuing advice and counsel may have a considerable value.

2. Financial responsibility may have a value that would warrant a corporation's paying somewhat more to one banker than to another. One would not acquire a doctor's services on the basis of fee alone. Even in highly competitive business a slightly higher price

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" The arguments of the Commission are set forth in connection with approval of assumption of liability by the Western Maryland Railway Company for an issue of certificates. I. C. C. Finance Docket 5549, June 23, 1926. 111 I. C. C. 434.

" Although it has no interest in the services of the investment banker, the Federal Government has failed to obtain the highest prices possible for a number of years. It has not used competitive bidding for its note and bond issues but only for its bill issues. The former characteristically go to a premium immediately after issuance, thereby tempting speculative subscriptions made solely to reap this profit.

"For a fuller discussion, see Franklin T McClintock, "Competitive Bidding," *Investment Banking,* September, 1939, pp. 24-29. For a market study of a small number of public utility issues under the two systems, see Ernest R. Abrams, "Fallacy of Competitive Bidding for Public Utility Securities," *Public Utilities Fortnightly,* April 1 and 15, 1937, pp. 414, 476.

may be paid in order to obtain special service and financial responsibility.

3. Some argue that the cost of financing under competitive bidding may run as high as or higher than when handled by ordinary private negotiation. They point out the following: (a) Given a continuing relation, the banker can spend more time on familiarizing his organization with the situation, do a more thorough job of selling on the initial sale, use more care in allotting bonds among dealers to obtain better distribution, and so lay the basis for more efficient and cheaper distribution of subsequent issues. (b) The banker who buys by negotiation may also aid in framing a bond contract that will better please the market and then time its offering so as to effect savings. He may also aid in the work of registration. (c) Finally, when investment markets are disturbed, the corporation may get necessitous financing done that might be impossible to place under a system of competitive bidding.[37] The banker is motivated in such cases partly by the knowledge that such service leads to repeat business and partly by a desire to preserve the financial standing of a corporation with which his name has become identified.

4. If, as it is argued, under competitive bidding there is a tendency to overprice the issue, the bonds will decline in price after distribution, thereby disappointing the investor and possibly affecting the corporation's credit adversely.

5. The investor probably receives less protection under competitive bidding because the investment banker does not have the same opportunity to participate in the drawing up of the indenture. Equipment trust certificates, still a gilt-edged security, are drawn today on looser terms than in the days prior to competitive bidding.

In conclusion, the practice of competitive bidding may be said to fare best in the case of (a) securities of the highest investment quality, (b) securities which have a well-established form of indenture known to be acceptable to buyers, (c) sales in periods of favorable investment markets, and (d) issues that do not require registration with the Securities and Exchange Commission. Should bidding take place at the end of the waiting period, as seems probable, the investment banker would be unlikely to have sufficient opportunity

[37] In a declining bond market in 1928, the Southern Pacific Company was able to obtain only three bids on a $4,815,000 issue of equipment trust certificates. These were unsatisfactory, and the Interstate Commerce Commission gave the company permission to negotiate with its bankers, with the result that the issue was taken at a full point better than the previous best tender. The issue was sold immediately. *Commercial and Financial Chronicle,* August 4, 1928, p. 681, and September 1, 1928, p. 1251. Investment banker assistance to the Toledo Traction, Light and Power Co. (now Toledo Edison Co.) in 1919 and the Northern Pacific and the Great Northern in 1921 is recounted by Reginald W. Tickner, "Responsibility of the Underwriter," *Barron's,* May 22, 1939, p. 18.

to make a thorough check on the issuer, as is desirable in view of the liabilities assumed under the Securities Act.

"Pegging" the price of new issues. Another trade practice that has been criticized is the general practice of supporting the market price so that it does not decline below the offering price during the period of distribution.[39] A "trading account" is generally established by the manager of the syndicate, which stands ready to purchase any part of the issue that comes back into the market during the period of sale. The criticism apparently rests upon a feeling that any control of market price is "manipulative." Since no secrecy exists about the support, this position seems to represent a confusion of ideas. The underwriters merely take the position of standing ready to buy back their merchandise at the sale price. If this support results in maintaining the price at a figure higher than the quality of the issue and the condition of the security market warrant, the error is one of pricing, and nobody, to the writers' knowledge, has advocated telling the bankers how to price their merchandise. Actually, such support constitutes a hazardous undertaking in view of the instability of the investment market, and presumably the bankers undertake it only because they believe that it pays in the long run by making their wares more readily salable than if each newly created market were forced to care for itself. At its inception this market is particularly price conscious, and a minor decline, even though temporary, might seriously interfere with the disposal of the balance of issue.[39]

In weighing investment banking as an economic institution, it is helpful to recognize it as a highly specialized field of merchandising. Its problems and weaknesses are those common in merchandising, where quality and fair price are not too readily evident. Bits of paper are offered as evidence of property rights, which may be backed by the most tangible and permanent sort of assets but the essence of

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Technically, this procedure is only half a peg, because it merely prevents a decline below and not a rise above offering price.

"In a test of syndicate price pegging, covering 288 issues totaling $8,427,900,000 offered in the nine years 1924-1932, Steiner and Lasdon found that 64 per cent of the issues broke the syndicate peg price within six months after issue. The average syndicate life was estimated to run from two to three months. Stated in this form, the implication was that bankers charge too much for, their wares, that corporations get a real service, and the investor would do well to wait for the issue to season. However, in view of the known fluctuations of even the high-grade bond market, fluctuations of a random sort below the offering price might be expected within six months no matter how reasonable the price at the time of offering. Unfortunately, the study does not show (a) whether there were equal market price fluctuations *above* as well as below the offering price during the period studied, nor does it show (b) whether the declines below offering price were any more than the random fluctuations of seasoned issues already outstanding during the period studied. W. H. Steiner and Oscar Lasdon, "The Market Action of New Issues—A Test of Syndicate Price Pegging," *Harvard Business Review,* April, 1934, p. 339.

which, "investment value," is often variable and fleeting. Furthermore, the buyers, particularly if they are individuals, are often poorly fitted to judge such matters even approximately. This statement about the individual investor has been especially true since the World War. The spread of wealth has greatly increased the number of individuals acquainted with bonds and stocks. Governmental regulation has been introduced to meet the problem. Many are inclined to overestimate the possibilities of such control, which at best can hardly do more than prevent downright fraud and require suitable publicity of essential information. But it cannot supply the investor with judgment to analyze and interpret the information made available. Probably the best recourse for the average individual will be indirect participation in the investment market through such institutions as the life insurance company, the savings bank, the building and loan association, and the investment trust. These provide investment management and diversification by indirection. For those of sufficient means, the services of investment counselors may be had.

The investment banker will continue to occupy his middleman position between corporation and purchaser of securities as long as his services spell more efficient distribution. Even where the investors reached are few in number and little selling effort is required, as in the case of the highest-grade bond issues sold largely to institutional buyers, the banker can provide a useful brokerage function in representing the several buyers jointly. As the scale of risk is ascended, the efforts, the prestige and affiliations, and the underwriting guarantee of the banker grow in importance to make him a valuable link between the corporation and the investor.

Regulation

State regulation of security sales. The various states have attempted to prevent the sale of fraudulent securities and to insist on certain standards of performance on the part of dealers in securities by means of the so-called "blue-sky laws," under which the consent of some commission or official must be obtained before the securities may be offered to the public.[40] These laws (the first of which was passed in Kansas in 1911) differ widely from state to state, but they may be classified into two main types, as follows:[41]

1. The punitive or "fraud" type of law, which provides penalties for fraud after the securities have been sold (Maryland, New Jersey, New York).

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[40] At the present time, only Nevada and the Territories are without blue-sky laws. Connecticut regulates mining and oil issues only.

[41] R. A. Smith, "State 'Blue-Sky' Laws and the Federal Securities Acts," *Michigan Law Review,* June, 1936, pp. 1135-1166.

2. The regulatory type, which attempts to prevent the sale of fraudulent securities.[42]

In addition, public utility security issues are subject to the regulation of public service commissions in most states.

The lack of uniformity of the state blue-sky laws, their limitation to intrastate sales, and their failure to make generally available the information which was required of the company and dealer applicants, coupled with the general feeling that the sale of fraudulent securities had not been properly curbed, led to pressure for more far-reaching Federal regulation. This was finally accomplished in the Securities Act of 1933 and its subsequent amendments.

Federal regulation; Securities Act of 1933. Prior to 1933, the Federal Government exercised limited control over interstate sales of securities through the prohibition of use of the mails to defraud under the act of March 4, 1909, and through the control of railroad security issues exercised by the Interstate Commerce Commission. In May, 1933, the Federal Securities Act[43] ("Truth in Securities Act") was passed for the purpose of seeing that complete and accurate information regarding securities offered for sale in interstate commerce and through the mails be made available to the prospective purchasers, and that no fraud be practiced in connection with the sale of such securities." Since fraud is unlikely when complete disclosure is made, the first of these two major purposes is of primary importance.

The act does not attempt to prevent the offering of speculative securities. The chief duty of the Federal Government, through the Securities and Exchange Commission (SEC) , is not to pass upon

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For convenient descriptions of state blue-sky legislation, see Hastings Lyon, *Corporations and Their Financing* (Boston: D. C. Heath & Co., 1938), Chapter XXX, and Shaw Livermore, *Investment—Principles and Analysis* (Chicago: Business Publications, Inc., 1938), Chapter XIX A bibliography on blue-sky laws and the Federal Securities Act is found in Commerce Clearing House, Inc., *Securities Act Service.*

"Public No. 22, approved May 27, 1933; amended by Title II of the Securities Exchange Act, Public No. 291, June 6, 1934, and by Public No. 621, May 27, 1936.

" Our discussion of the Securities Act is necessarily brief. The following discussions of the act and its application by the Securities and Exchange Commission are particularly valuable: *Law and Contemporary Problems,* issues of January and April, 1937, are devoted to the general subject of "Three Years of the Securities Act," and contain 13 articles of real merit on the various aspects of the act and its application. J. W. Blum, "The Federal Securities Act, 1933-36," *Journal of Political Economy,* February, 1938, pp. 52-96, provides a good review of experience to 1937. J. K. Lasser and J. A. Gerardi, *Federal Securities Act Procedure* (New York: McGraw-Hill Book Co., 1934), conveniently classifies the necessary information for those interested in the act from the issuers' and dealers' points of view. In this connection, see also Prentice-Hall, Inc., *Securities Regulation Service,* and Commerce Clearing House, Inc., *Securities Act Service.*

the investment merits of the securities, but to see that investors are informed of the facts concerning securities to be offered for sale. It seeks to obtain this objective by several provisions:

1. By providing that no securities, other than those which are specifically exempted, may lawfully be sold or offered for sale in interstate commerce or through the mails unless a *registration statement* containing complete information, as provided by the act, is filed with the SEC and unless a *prospectus* (ordinarily a compilation of the more important matter from the registration statement) in the form required by the act is made available to the prospective purchaser.[45] Exempted securities include Federal, state and municipal obligations, railroad securities, bank, insurance company, and savings and loan association securities, and securities offered by nonprofit institutions and receivers. Private offerings of securities are also exempted. The SEC has, in addition, exempted small issues (under $30,000, but, under certain conditions and in certain cases, up to $100,000).[46]

2. By giving the SEC the power to prevent the sale of securities until the proper information, completely and accurately stated, is provided in the registration statement.[47]

3. By providing criminal liability and penalties for willful violation of the act and for willful omissions and untrue statements of material fact in the registration statement.

4. By giving purchasers of securities sold the right to claim damages from the issuer, the principal officers signing the registration statement, the directors of the issuing company, accountants, engineers, and others responsible for material in the statement, and underwriters connected with the issue, if the prospectus contains an untrue statement of a material fact or omits a material fact. The damages claimed may equal the difference between the amount at which the security was offered to the public and the value at the time a suit is brought, unless the security is disposed of with a smaller loss. To be allowed, the suit must be brought within one

" See Lasser and Gerardi, *op. cit.,* and the Securities Act services for copies of the forms.

" From July, 1933, to June 30, 1938, 3,740 statements were filed under the act. Of this number, 2,499 covered all securities which were fully effective (with the exception of those issued in reorganization or in exchange) to the amount of $12,119,000,000 (less securities reserved for conversion). Securities and Exchange Commission, *op. cit.,* p. A-16.

" The original act of 1933 provided for the administration of the law by the Federal Trade Commission. The Securities and Exchange Act of 1934 set up the SEC and gave the administration of both laws to this body. The SEC consists of five commissioners appointed by the President with the advice and Consent of the Senate for overlapping terms of five years. The work of the Commission is shared by ten major divisions. The United States has been divided into eight zones, and a regional office has been established in each zone.

year after the discovery of the untrue statement or omission and within three years after the date of original offering.[48]

The heart of the legislation is the requirement of disclosure of complete and accurate information in the registration statement and prospectus. This is supposed to enforce standards of fair dealing and honesty on the part of issuers and underwriters and to supply the necessary information upon which the investor may judge the merits of the securities. It is very difficult to measure the tangible results of the legislation. There can be little doubt that the prospective investor is benefited by the availability of complete and accurate information concerning the nature, financial condition, and management of the issuing companies. Probably the average investor cannot or does not make use of this information to the fullest extent, but it is available to him and to investment advisory services. Small distributors and retailers of securities have a better basis for selection and recommendation of securities to their clients. Before qualifying their securities, the issuing companies must, get a complete check-up on their affairs, which is to their advantage as well as to that of the investor. And the refusal of the SEC to approve some registration statements is probably more effective in eliminating the sale of fraudulent securities than are the diverse blue-sky laws of the various states.

The biggest objection to the original act was that its stringent penalties and liabilities prevented companies and underwriters from engaging in new financing. It is difficult to measure the degree to which the legislation did interfere with new financing. The amendments of 1934 clarified the act and made it more workable, and fear of criminal and civil liabilities no longer appears to be an important deterrent to legitimate financing. Although the law has been on the statute books for over five years, no liability case has as yet been brought to the Supreme Court.

It must be clearly recognized that such legislation requiring full disclosure will not prevent loss to investors. Investment losses are caused by many factors other than the lack of adequate information.

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[48] Certain limitations on the collection of damages and on the liability of defendants are carefully specified in the act. Underwriters, officers, and directors (but not issuers and experts) may avoid liability if they had reason to believe the facts as stated were correctly and fully stated, or if they placed bona *fide* reliance on an expert's report and had reason to believe that the registration statement fairly represented the expert's report. The purchaser cannot recover if the issuing company has published an earnings statement for a full year subsequent to the effective date of the registration statement, unless he can prove that he relied on the untrue statement. The defendant is not liable, however, for whatever part of the loss he can prove is due to factors other than the omissions and misstatements. The maximum amount for which any banker who has underwritten or sold securities may be held liable is limited to the total value of the securities of the issue concerned underwritten or sold by him.

The Commission's constant admonition that its function is not to guarantee the investment merits of the securities which it qualifies, but merely to insist on complete disclosure of material facts as required by the law, is in proper recognition of this fact.

Regulation of bond indentures. Under the Trust Indenture Act of 1939 the regulation of securities embodied in the Securities Act of 1933 was extended to include provisions covering the trust indentures of debt securities. Registration of such securities is not effective until the indentures conform to the requirements of the act and are qualified by the SEC.[49] The registration statement and prospectus must include an analysis of the indenture provisions covering such matters as default, authentication by the trustee, and release or substitution of any pledged property.

[49] See p. 127.

CHAPTER 15

THE ORGANIZED SECURITY EXCHANGES

Origin and Nature

A MARKET exists wherever buyer and seller meet. A market place is a convenience in that it provides a place for a large number of buyers and sellers to come together and effect sales more quickly and cheaply than would otherwise be possible. The organized security exchanges are market places open only to members, who are chiefly brokers acting for buyers and sellers of the stocks and bonds permitted in that market. By far the most important exchange is the New York Stock Exchange, which serves as a national center. The New York Curb Exchange stands in second place, serving for securities whose issuers, for one reason or another, have not seen fit to apply and qualify for listing on the "Big Board" of the New York Stock Exchange Other major cities, such as Chicago, Boston, Philadelphia, San Francisco, Baltimore, and Detroit, and, in Canada, Toronto and Montreal, have stock exchanges that serve as trading centers for stocks that have a large local following.

The New York Stock Exchange. The New York Stock Exchange had its origin in meetings of brokers, which were first formally organized in 1792. Trading was chiefly in the national debt of 80 millions of dollars, which was created by Congress in 1790, and the stocks of three incorporated banking institutions. Not until 1817 did this organization move indoors into its own quarters and function under a constitution. Just as the building of railroads was the outstanding factor in the economic development of the country, so the trading in their securities was most important in expanding the operations and significance of the Exchange. Later the need for gas, then electricity, and finally the telephone created public utility listings for this market. In the latter part of the nineteenth century the growth of large-scale manufacturing units was marked by huge mergers, and the result was a great increase in the volume of publicly held industrial stocks to be traded there.

Something of the magnitude of the operations of the New York Stock Exchange may be judged from the figures given in Table 27.

An exaggerated idea of the relative importance of the giant cor-

porations whose securities are listed may easily be formed as a result of the wide publicity which attaches to the activities on these exchanges. The United States Treasury, Bureau of Internal Revenue, reports that in 1933 the capital assets of 388,564 reporting corporations submitting balance sheets amounted to 105 billion dollars.[1] However, the 594 largest corporations (reporting assets of 50 million dollars and over) owned 53.2 per cent of this total. At the opposite extreme, 211,586 corporations, with assets of less than $50,000 each, owned only 1.4 per cent of the total assets.[2]

The figures for other exchanges are much less impressive, and, since the issues of some corporations are listed in two places, duplication wotIld result from attempts to compute the total securities listed by a process of simple addition.[3] The lesser activity on

TABLE 27

LISTINGS AND VOLUME OF TRADING, NEW YORK STOCK EXCHANGE

	Bonds	*Stocks*
Listings, January 1, 1939:		
Number of issues	1,393	1,237
Amount of securities, .	51.6 billion dollars (face value)	1.4 billion shares
Market value	47.0 billion dollars	47.5 billion dollars
Volume of trading, 1938:		
Amount traded	1.9 billion dollars (face value)	422 million shares
Market value	1.3 billion dollars	11.0 billion dollars

Source: *New York Stock Exchange Year Book,* 1938.

smaller exchanges is likely to give an understatement of the importance of their listings, because short-term speculation tends to favor the more active stocks of the New York Stock Exchange, and longer-term holding, even when for speculation, is more usual for the less active stocks of smaller corporations.[4]

Importance to corporation financing. Some might argue that the exchanges have little importance in corporation finance, for rarely do companies sell their securities directly on the exchange.

[1] United States Treasury, Bureau of Internal Revenue, *Statistics of Income,* 1933.

[2] Twentieth Century Fund, Inc., *Big Business: Its Growth and Its Place* (New York: The Fund, 1937), pp. 54-55.

[3] From a sample of 25 leading issues on the New York Stock Exchange, 7 were also listed in Chicago, 9 in Boston, 4 each in Philadelphia and San Francisco, 2 in Baltimore, 2 in Detroit, 1 in Pittsburgh, 1 in Washington, 1 in Richmond, and 1 in Louisville. As for foreign markets, 17 were listed in London, the same- number in Amsterdam, 5 in Glasgow and in Bradford, 4 in Halifax, 3 in Liverpool and in Birmingham, 2 in Edinburgh, and 1 in Paris, in Berlin, and on German and Swiss exchanges. *New York Stock Exchange Bulletin,* July, 1931, p. 1.

[4] For detailed data on the volume and value of trading on all exchanges and the types of securities and industries represented, see Securities and Exchange Commission, *Selected Statistics on Securities and on Exchange Markets,* August. 1939, pp. 49-58, A36-A50.

Trading there is in "secondhand" securities, as it were—stocks and bonds that are already outstanding. The leading reasons why the exchanges are important, all relating primarily to common stocks, are that (1) many would not purchase certain issues if they were not assured of the marketability that is associated with listing on an exchange; (2) the ready market aids in original distribution by indirection by making easier the work of what is known as secondary distribution, which will be described later; and (3) the exchange helps in the distribution of common stock by corporations directly to their own stockholders by absorbing any balance not taken up by those who have the rights. The functions of the market can be stated most fully and concretely in terms of the services it performs for the investor, the corporation, and the investment banker. The classification is necessarily arbitrary, for any advantages to the investor also help the corporation by making its securities more attractive.

Services Performed by Exchanges

Services to the investor. The chief services performed by the securities exchanges for the investor are the following:

1. Improved marketability. Marketability is measured by two qualities—first, the speed with which a buyer or seller can be found, and, second, the ability to absorb buying or selling without a large price movement. It is easy to see how a central market, where bids and offers can be brought together quickly and effectively, should speed up the selling process. Dealers may also make a quick market for securities that are not listed on any exchange, but investors often have difficulty locating such a market. The breadth or firmness of the market is likely to be greater on an organized exchange, for the more numerous the bids and offers attracted to one central place, the greater is the volume of both buying or selling that can be absorbed with a minimum of price movement.

The primary factor in marketability will, of course, be found in the character of the issue itself—(a) its size, (b) its distribution, and (c) the character of holders. A very large issue of securities will tend to have more buying and selling going on in it than a small issue. Mere listing on an exchange will not automatically create trading in a small issue. On the other hand, a large unlisted issue of bonds or stock may see a considerable amount of trading. If an issue is distributed among a large number of owners, the chances of a desire to buy or sell are correspondingly increased, so that the number of trades is likely to be increased. Also, because the larger number of holders means a reduction in the relative importance of the average person's holdings, the market is less likely to be jarred by a big buying or selling order. Every holder becomes interested

in the market and is a potential buyer or seller if he thinks the price has become extremely low or too high. It is because of wide distribution and large size that major stock issues on the New York Stock Exchange are so difficult to manipulate.[5]

The character of the holdings, as well as size and distribution, is a factor in the market. When a bond or even a stock has become settled in its good character, it tends to drift into the hands of permanent holders. In the language of the investment community, the establishment of a favorable record "seasons" the security. Trading becomes infrequent. For this reason, a second-grade speculative bond may enjoy larger trading activity, and so better marketability, than some bonds of better quality. In the same way some of the very speculative listed common stocks enjoy excellent marketability, so that their market is speedy in execution and capable of absorbing considerable buying or selling without extreme price movement. However, over longer periods such speculative stocks will fluctuate much more violently than the unspectacular seasoned bond because of large changes in the earning prospects of the former and in the attitude of the capricious speculative fraternity.

The best single index of the character of the holdings is the activity of the issue as measured by the volume of trading. Ordinarily, the explanation is speculative interest—that is, interest in the price movement—as distinguished from investment interest, which is concerned with long-run income from interest or dividends. Speculative issues, as a rule, are more active marketwise than investment issues. An interesting exception shows why the phrase "attitude of investor" must be broadly interpreted. Certain of the short-term issues of the United States Government, which are exceptionally stable in price as well as unusually marketable, are purchased for those very reasons by commercial banks to provide a liquid investment. Readily shifted, such issues are consequently bought and sold more often than the less stable long-term issues. It is not improbable that some of the activity in listed investment issues, such as American Telephone and Telegraph Company stock, is due to the fact that investors rely upon such marketable holdings to give some liquidity to an investment list that may include possibly more speculative but less marketable issues. Some activity,

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[5] An interesting example is found in the stock market battle in which a group tried to buy enough Erie stock to corner the supply and force Daniel Drew to pay heavily for his short sales in that issue. The price was driven up, and it looked as though Drew would "pay through the nose" to settle his contracts. However, the high price attracted sales from a myriad of small holders, and the corner was broken. In these days of more widely held stock, it would be even more difficult to attempt the manipulation of a large price movement in a major issue. Charles Francis Adams, Jr., "A Chapter of Erie," in *High Finance in the Sixties,* F. C. Hicks, editor (New Haven: Yale University Press, 1929).

then, may be attributable not to speculative motives but to use by investors for liquidity purposes.

The motives which cause security buyers to seek marketability are probably three. They wish to be able to change their minds and dispose of their purchases if earnings, dividend policy, managerial character, or some other factor does not live up to their hopes and standards. Some investors will not acquire any security not listed on the exchanges. The possible need to resell in the event emergencies require a recovery of funds also makes marketability valuable. And, finally, with the growing importance of death, or succession, taxes there is always the contingency that death will make liquidation necessary to pay this "capital levy."

2. Collateral value. Marketability does not insure a stable price. For this reason many investors who recognize the hazard of loss of principal if resale is attempted on short notice appreciate the value of being able to borrow on their securities to meet small needs. By repayment of such loans out of income, an investment list can go undisturbed, and sometimes taxes upon capital gains may be avoided. Securities which are listed and for which published price quotations are readily available make the most satisfactory collateral. Businessmen are particularly appreciative of the usefulness of collateral value.

3. Publicity of corporate affairs and security prices. One of the requirements for listing is that the corporation agree to publish at regular intervals information about its financial condition and earnings. This publicity feature, which is now reinforced by the regulatory powers of the Securities and Exchange Commission, is especially important for the owner of second-grade bonds and of stocks. Without such knowledge it is impossible to evaluate securities in case of a sale or to take proper steps to limit losses. In the same way, information as to the prices at which market transactions are taking place and the volume of trading is also useful.[6] In the case of unlisted securities this information is not generally available, although the approximate market price may be supplied by dealers specializing in the over-the-counter market. In the case of active, high-grade bonds such reported prices are accurate, but, as one moves down the scale to inactive common stocks and other speculative securities, they may be nominal and unreliable. Quotations

[6] An example, interesting because of its background, is that of the distribution of stock to the public and subsequent listing by the Birdsboro Steel Foundry and Machine Company, which dates back to 1740, when William Bird set up for himself after working in Pennsylvania's first iron forge, founded at Boyertown in 1733. One of the purposes set forth for the issue and listing was "to establish a price for the common stock for the convenience of present owners, mostly family members and widely scattered." Other purposes given were to redeem preferred stock, pay off bank loans, and increase working capital. *Time,* July 5, 1937, p. 48.

are said to be "nominal" when they represent merely informed estimates of the market level. Attempts to execute a sale at "nominal" prices may be quite unsuccessful.

In the over-the-counter market, trades are made typically with a dealer, who technically buys and sells for his own account. Actually the dealer may not "take a position" in the security (that is, acquire. it for his own account and on his own risk) but may only execute purchases and sales when they can be executed simultaneously and at a sufficient spread between the two to yield him his desired profit margin. Competition with other dealers and brokers should keep this margin reasonable. But, in the case of inactive securities and in the absence of published quotation material such as exists for the stock exchange, an exorbitant profit margin may be obtained. When, however, the dealer does undertake the risks of maintaining a position in the security from time to time, or when he performs a special service by building a market through circularizing interested owners in order to keep them familiar with the market conditions, he may legitimately expect a profit margin somewhat higher than the commission compensation of the ordinary broker in listed issues.

4. *Financial responsibility of exchange brokers.* In dealing with over-the-counter dealers or brokers, the public can have none of the assurance that is enjoyed in dealing with the members of an organized exchange, where standards of financial responsibility and of business conduct are enforced. The hazard of dealing with a possibly insolvent party is especially grave when securities are left with him, as is done when an unpaid balance exists. This risk was much more serious in former times, before warfare on "bucket shops" was so vigorous. These houses were ostensibly brokers, but they were not members of any of the better exchanges. They operated on the theory that speculative customers always lose, and so they simply entered buying and selling orders for securities on their books without executing them. Prices were based on those reported by the regular exchanges. If prices rose and the customer made money on his deal, the net profit had to come out of the bucket shop, and vice versa. Disclosure of the true situation usually came to the customers in a persistently rising market, when a majority of the customers were winning enough so that their attempts to withdraw credit balances found the bucket shop insolvent as a result of "betting against its customers." Failures among members of the New York Stock Exchange have been very few even in depression years. Rules of conduct are also laid down by the Exchange to insure equitable dealing and the avoidance of practices which might place the broker's interest in opposition to that of the customer for whom he acts as agent.

Services to the corporation. As previously suggested, all those advantages of listing and trading, upon an organized security exchange that inure to the investor are indirectly advantageous to the corporation. From the corporation point of view the direct advantages are as follows:

1. *Lower financing costs.* By providing attractive qualities for the investor the work of selling securities is made easier. All classes with a potential interest are attracted; not Only the investor who merely wants marketability for emergency purposes, but also the speculator who requires marketability to achieve the profits he hopes for from appreciation if his judgment on the outlook is correct. Whatever increases the effective demand for an article will tend to raise its price. In terms of the corporation's problem, this tendency means that both the cost of selling securities and the return which must be offered as an inducement to obtain funds are lowered.

2. *Advertising of securities and widening of distribution.* As a result of the widespread publicity given to the price quotations and the activities on the exchanges, corporations are given what amounts to free advertising of their issues. Such quotation material, plus the incidental' financial information, invites the kind of scrutiny that is likely to increase the number of buyers, provided that the facts are favorable. Typically it is the corporation in a favorable statistical position that can use this increased demand for its securities, because profits are something of an index of the economic demand for the goods and services of the company and its ability to expand to advantage.

This flow of information may come directly to the investor' or speculator searching for opportunities, or it may reach him indirectly through brokers or dealers seeking to promote business by suggesting advantageous commitments. The selling efforts of the corporation are of a passive character. The burden of search is borne by the buyers. The force of this constant scrutiny is what tends to keep securities "in line" with one another. When a security appears to be relatively cheap compared with other securities, bargain-hunting activities tends to make holders shift into the undervalued' issue, and vice versa. In this way the force of selling in a particular security has its influence spread through the market somewhat on the same general economic principle that causes the price of a commodity to influence the market of substitute products. This principle explains in large part why the market aids a corporation when it sells stock through the use of subscription rights to its own stockholders.

3. *Aid in sale of securities by rights.* Just as the corporation generally sells a bond issue through investment banking channels,

so it typically offers its common stock to its existing stockholders by giving them rights to subscribe to the new issue at a price lower than the going market price. When the amount offered for sale is small in relation to the amount already outstanding—say not more than the dividends for one or two years—the corporation can hope that satisfied holders will exercise their rights and take the whole issue. Where the stock is unlisted, any unsold balance may create a problem. Where the stock is listed and moderately active, however, stockholders can easily sell their rights to others, and the extra stock may be sold on the general market. The process will be more fully discussed in the next chapter, but it is clear that, to the extent that the organized market is successful in absorbing such selling and keeping the price up in a reasonable alignment with other securities, it performs a valuable function and reduces the cost to the corporation of obtaining its new funds.

Issues of bonds and preferred stocks that are convertible into common stock are also commonly offered through subscription rights to the stockholders. Such a conversion privilege has the greatest value when the security into which conversion may be effected is listed. With price quotations constantly available, the worth of the privilege is more readily evaluated. When bonds of this type are held by an investor that is unwilling or unable because of legal restrictions to hold common stock, then the only way in which the profits of conversion can be realized is by selling when the common stock has reached a high enough price. For this reason the listing feature is particularly useful to the corporation employing a security convertible into common stock.

4. *Advantage in merger.* When listing has improved marketability and made a company's securities more attractive to investors, the market price will tend to be somewhat higher in relation to earnings, dividends, and property values than would otherwise be the case. Such a corporation has an advantage in approaching with merger plans another not so situated, especially if the latter is a small corporation and securities are being offered for its property. A relatively high value for a company's stock is a valuable bargaining factor. Even if cash is being offered, a company can, by virtue of a favorable market for its issues, raise funds cheaply to buy properties that are at a disadvantage in this respect. Such a deal can be mutually advantageous. The owners of the small property may obtain a better price than the investment market would pay directly for their securities, and the purchasing corporation may get a property that increases its earnings and assets by a greater percentage than the increase in its outstanding capitalization.[7]

[7] See Chapter 24, "Mergers and Consolidations."

Possible disadvantages of listing. Occasionally the factors that make a virtue of listing on an exchange react unfavorably.

1. *Adverse credit influence in periods of trouble.* The advertising of widely published price quotations, which helps to distribute the company's securities, can on occasion also injure credit standing when the prices are falling, even though the decline may be but a short-term speculative reaction. Such a price movement is often accompanied by rumors designed to "explain" the recession. If the company were about to finance through a security issue, this condition would be unfortunate, although it should be noted that such a decline might be a part of a general market trend, which would handicap a sale in the unlisted as well as in the listed market. Where credit is obtained from banks or merchants, this factor will depend for its importance upon how far such creditors are intimately acquainted with the actual condition of the corporation and how far they are influenced by rumor and opinion. With the development of modern credit files, these creditors should be above the rumors of the market place, which counted for so much in the past, when financial statements were less frequently used and reputation, based chiefly on promptitude in debt payment, counted more. Since credit is used mostly by the smaller corporation, which finds the least advantage in listing, it is probable that this objection to listing is of little general weight, but it might be worth considering in particular cases.

A special situation exists, for those corporations which depend upon public confidence in their business. Commercial banks are of this type. They may well fear an impairment of confidence on the part of depositors should a period of widespread liquidation at a time of uncertainty bring on an advertised collapse in the price of their shares. Commercial banks are averse to seeing active speculation in their shares and avoid listing.

2. *Loss of control of the corporation.* While the organized market facilitates wide distribution, it also makes it that much easier to buy a substantial interest or even control of a corporation with listed stock. Such buying is most easily effected in corporations with only a small amount of voting stock or those whose stock has been greatly depressed in price. Either condition lowers the cost of acquiring control. The first condition can be minimized by maintaining a conservative capital structure. The more largely it consists of common stock, the more expensive it will be to purchase a controlling interest. The second condition is also overcome by conservatism and efficiency. Good earnings, regular dividends, and a conservative capital structure make for investment holding. Stock is most easily picked up when it is held in speculative hands; which

are likely to sell whenever the prospect of market inertia or decline threatens.

However, this possibility is a risk only from the point of view of management and not from the point of view of the corporation or its stockholders, unless it will lead to the ousting of skillful for less skillful operating officials. As long as the buyers of control are interested in enhancing the value of their purchase and have no ulterior motive, such as the suppression of a business competitor, it is hard to be critical of such an operation. Inefficient management should have this threat of expulsion held over it, and the buyers would perform a useful function in rehabilitating a business not properly utilizing its opportunities. A special inducement to acquire control would exist if the value of a corporation's properties would be enhanced by integration or merger with those of other concerns.

3. *Increased danger of stock manipulation.* The creation of a free and open listed market increases the interest of speculators in a stock issue because it facilitates getting into and out of a holding. Speculators range from those, on the one hand, who are well-informed and buy because they believe a security is undervalued and that short-term holding will net them appreciation profits, to those, on the other hand, who subsist wholly on tips, rumors, and hunches. The former perform a useful function in producing fairer prices for stocks in much the same manner as speculators in commodities do. Uninformed speculators can actually cause price fluctuations to be more violent because, attracted by rising prices and speculative fever, their buying tends to hoist the price beyond a reasonable level, just as the subsequent disappointed selling of those who fail to profit may later drive the stock down in a seemingly inexplicable reaction.[8] Unconcerned about the investment value of a stock, a speculator of this type merely hopes that some other gullible buyer may be found to purchase his holdings at a higher price. Falling prices or even mere price inertia drive him to sell even when a study of fundamentals might show substantial values behind the market price.

Such a market lends itself to manipulative leadership. A well-organized and suitably financed pool may deliberately engineer a movement in a stock when general market conditions are propitious.

Only by allowing for the whimsicalities of speculative psychology can some of the apparently illogical maxims of the stock market be explained. Thus, a new high in the price of a stock might suggest caution to the average person, but market saws say, "When a stock exceeds its previous high, it is bound for higher levels," and "When a stock breaks to a new low, it is bound for lower levels." Again, the speculator is warned never to buy in a declining market but to wait for the trend to turn upward, and vice versa.

Since activity and rising prices are the best-known method of attracting a speculative following, a pool must accumulate its initial holdings slowly and without exciting interest too early. "Distribution" will be attempted after a rising market has attracted a sufficient number of speculators anxious to "take a ride" to profits. With none too well-informed purchasers of this latter type, it is not hard to understand why such a movement can overshoot a proper mark or even elevate prices without any substantial basis or reason.

Manipulated prices are chiefly a concern of the investing public, but they may become a serious handicap to a corporation if they cause unreasonably depressed prices at a juncture when financing is being undertaken. Where a few stockholders own important blocks of stock, they may check manipulative tactics by suitably timed buying and selling.[9] Such support is rarely undertaken in the case of major corporations. Even the largest stockholders are likely to own so small a proportion of the stock as to feel impotent to influence the market Experienced businessmen are also aware of how their "inside knowledge" may be quite misleading as a basis for speculation, because market movements are subject to such powerful external factors that influence sentiment. In recent years officers and directors have also come to fear that any efforts on their part might be termed manipulation and be suspect. (Limits on their speculation are stated below.) And, finally, high income tax rates levied on income that includes capital gains may make market sponsorship costly to the well-to-do. After paying a substantial tax, a very large decline may be required before the wealthy seller will be able to replace his sold out holdings from the net proceeds. Moreover, heavy surtaxes eat substantially into profits made in any given year, but the Government does not share heavy losses and allows them to be carried forward to later years to reduce taxable income to only a very limited extent (under some conditions not at all)."

A press account states: "They [the Swifts] have systematically discouraged excessive speculation in their own stocks, particularly by professionals, by holding market prices within comparatively narrow limits." Despite a regular annual dividend of $8 from 1919 to 1929, Swift & Company stock never rose over 146 even during the bull market of 1929. It fell to 89 during the 1921 depression but after 1924 never dipped below 100. After the four-for-one split-up in 1930, the stock held in a range of 27 to 33t until the middle of 1931. The first serious break was in December, 1931, and was accompanied by a rumor that an Eastern relative was liquidating a block of 30,000 to 40,000 shares after failing to negotiate a private sale with the Chicago family. Later, according to brokers, liquidation became necessary for one of the family to protect margin brokerage accounts. Following the death of Edward F. Swift, the price of Swift & Company shares sagged to 7. (Fear of liquidation to meet estate and inheritance taxes.) The company's financial position remained strong throughout the period. *Chicago Tribune,* May 29, 1932.

" To illustrate how high taxes of this sort on income may fix the odds against a wealthy operator, note that, when the tax takes 50 per cent of profits, the operator must make profits in two years of a given amount merely to counter-

4. *Diversion of managerial interest to stock market.* The argument has been advanced that listing of a corporation's stock may cause officials to take an undue interest in security prices. They may even ignore their quasi-fiduciary relation to their stockholders and attempt to use their advance knowledge of conditions to speculate in the company's stock. The belief that an officer or director of a corporation should not be permitted to speculate when his interest might be opposed to that of the stockholders or the corporation explains the following rules: [11]

1. Any profit made from speculation when the securities are bought and sold within six months is recoverable by the corporation.
2. Short sales by officers and directors are forbidden.

The first provision is to prevent gain from knowledge acquired by official position in advance of the general investor; the second is to prevent officers from taking a position when profits would accrue from the misfortune of the corporation.

A more insidious market influence is the fact that the management may know that policies, though desirable in themselves, may cause the market price to decline and so hesitate or fail to put them into effect. Drastic rehabilitation of plant, extensive model changes, cleaning out of unsuitable inventory, or a necessary increase in depreciation allowances may depress reported earnings but be obviously sound measures to maintain the financial health of the corporation. Reduced earnings and dividends may stir up the criticism of disaffected stockholders and make things uncomfortable for the management. This influence explains why radical innovations and daring experiments of a pioneering sort are very often the work of smaller concerns, many larger companies preferring to take a more "conservative" position. Sometimes this tardy attitude results in too great a delay, and obsolescence causes the corporation to lose its position in the industry. In extreme cases complete reorganization may be required to reform a moldy situation.

Investment banker's interest in the market. The foregoing recital of the advantages of an organized exchange to the investor and the corporation explains why the promise to list a new issue makes easier the sale of an issue by an investment banker. Especially is this true for common stock issues, in which speculative interest is more usual. In the case of bonds and preferred stocks, the over-the-counter market may be much more important than that on the exchange, and yet listing will be desirable. The occasional sales on

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balance one year of loss at the same figure. The interested student can figure out how the odds are fixed by different tax rates when it is assumed that profits and losses occur in different years, and the losses cannot be used to offset taxable profits.

" Securities and Exchange Act, 1934, Sec. 16.

the exchange give the public a clue to the course of the market and serve to advertise the issue.

On the other hand, the very fact that listing makes an issue more attractive to the speculative minded means that the task of safeguarding the market price from undue fluctuations is made more arduous. During the period of selling and sometimes thereafter the investment banker may feel that his prestige is injured should selling depress the price below the original offering figure. He feels obliged to reacquire any securities dumped back on the market by disappointed speculators who hoped to "take a ride" if the issue had succeeded in rising to a premium over the original price. Such speculators feel protected against loss by the pegging of the bankers. When the problem of reselling such repurchased securities is anticipated, the bankers may accept oversubscriptions on the original issue (that is, "go short") in the belief that they will be able to cover this excess by buying back later. The practice involves the danger of the issue going so much better than had been expected that covering can be accomplished only by buying in the open market at a premium and so netting the syndicate a loss.

An important compensation to the investment banker for the risk of listing is the greater safety of handling issues that can develop an independent market. Unsold portions of such issues, if not too large, can be disposed of gradually through the market at some price, and the loss is limited. Furthermore, the listed market will enable him to obtain collateral loans more easily in order to help carry the financial burden of such securities until they are sold. Unlisted issues, especially common stocks, may depend so much upon the investment banker for their over-the-counter market as to make any unsold balance a frozen asset. While he might be willing to mark the item down and sell it under the anonymity of the exchange after the original syndicate had dissolved, he hesitates to do so in the small over-the-counter market which he sponsors himself.

Features of Exchange Operation

Membership on exchanges. Trading on the floor of the stock exchange is limited to individuals who have become members by acquiring a "seat." Such membership is obtained by purchase from a retiring member and passing the scrutiny of the admissions committee. Where the privilege of trading is valuable because the potential commissions to be reaped are large, as on the New York Stock Exchange, the cost of a seat will be high, but on the lesser exchanges, where trading is light, the cost may be hardly more than that of joining an exclusive social club.

Most members are primarily interested in acting as commission brokers for others in dealings on the exchange. They may, however,

wish to deal or trade there for their own accounts. At present they are permitted to act in both capacities, although the Securities and Exchange Commission has under consideration the advisability of compelling a separation of these two functions after the manner of the London Exchange. The New York Stock Exchange, which serves as a pattern for the smaller exchanges, has strict rules to prevent members from taking a dual position which might put their interest in conflict with that of their customers. When a broker deals with a customer as a principal, he must notify him to that effect and may not charge a commission on the transaction. Customers' orders must be given precedence in execution on the exchange, and, when a member wishes to trade with a customer, he must first attempt to execute the order on a more advantageous basis on the floor of the exchange. Members are also forbidden to engage in manipulative or other harmful practices. In the language of the constitution of the New York Stock Exchange, its objects are ". . . to furnish exchange rooms and other facilities for the convenient transaction of their business by its members; to maintain high standards of commercial honor and integrity among its members; and to promote and inculcate just and equitable principles of trade and business." (Article I).

In order to qualify for registration under the Securities Exchange Act of 1934 (Sec. 5), an exchange must have rules that provide for the expulsion, suspension, or disciplining of members for conduct or proceedings inconsistent with just and equitable principles of trade, or for violation of the act or rules and regulations established under it.

The members are organized as a voluntary association, which enables the governing body to discipline members more rigidly than would be possible under incorporation. Members deemed guilty of improper practices may be summarily expelled, as from a club, a course which might be impeded by court action if the guilty party were a stockholder. The infrequency of insolvency and the rarity of charges being preferred against members of the New York Stock Exchange speak well for the effectiveness of this self-regulation, which was not supplemented by government control until the Federal Securities Exchange Act of 1934.

Effects of regulation by the Securities and Exchange Commission. As far as the work of the Securities and Exchange Commission deals with the exchanges, it has been valuable in the following ways:

1. Reinforcing the efforts of the exchanges to obtain adequate financial reports and other information from corporations with listed securities. The exchanges have been able to raise their standards only as public sentiment has grown. Some of the older corporations

that came on the New York Board years ago, when standards were much lower, have been among the worst offenders in the matter of inadequate information. Common delinquencies have been failure to report annual depreciation allowances, total accumulated reserves, volume of sales, or character of investment holdings. Tardiness of annual reports and omission of reports to show the course of earnings during the year have not been uncommon The Commission has brought the force of law to supplement what was formerly a work of persuasion and voluntary agreement by the New York Stock Exchange authorities with the management of listing corporations.

2. Providing a more vigilant check upon manipulation. Police work of this sort can be most effective if it is conducted by a competent, independent agency which scrutinizes any unusual market movements. While an exchange can discipline its own members, the most glaring cases of strong-arm manipulation in recent years have been engineered typically by nonmembers sometimes acting in conjunction with officers of the corporation whose stock was used. [12] Exchange authorities are not in the position to inflict penalties that the Government is. Should the exchange threaten to remove the manipulated stock from the list, the injury would fall chiefly upon the great body of innocent stockholders, whose holdings would be made less attractive.

3. Acting upon problems which are of general economic or public concern. While the powers of regulation to curb stock market excesses have been greatly exaggerated in the popular mind, nevertheless the Government would seem to be the most suitable agent for controlling the security markets so that their activities will harmonize with the general welfare. A control measure of this type is found in margin regulation. (When stock is bought on margin, the buyer pays down a certain percentage of the price in cash, borrowing the balance from the broker, who in turn borrows this "margin" from a commercial bank by pledging the stock.) Two distinct reasons can be advanced for this particular control measure: first, to reduce the ill effects of speculation with too slender margins, and, second, to use

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"In 1933 the common stock of Atlas Tack Corporation rose from it in February to a high of 34f on December 15, and broke to 14t by December 18. It subsequently declined to 10 before the end of the year. The rapid rise and fall of the stock was attributed to pool manipulations. An extensive probe of the market action of the stock and the commitments of brokers and others was begun on December 18, 1933, by the State of New York Attorney-General's office. The New York Stock Exchange revealed that it had been watching the movements of the stock for six weeks and had been requiring records of all transactions made through member firms. *Commercial and Financial Chronicle,* December 23, 1933, p. 4531.

In March, 1935, fifteen individuals and two financial services were indicted by the Federal Grand Jury. The corporation's officers and directors were given a clean bill of health. *Ibid.,* April 6, 1935, p. 2348.

margin requirements to combat the cyclical influence of security speculation.

The first reason is the easier to support. If speculators are allowed to buy stocks on a small margin and use borrowed funds extensively, a relatively small decline in the market value of their holdings soon endangers the security of the loan and will result in a forced sale. Such selling will bear no relation to the long-run investment merits of the security but only to the necessities of the distressed speculator. Market operators express this idea by saying that stock has passed from strong into weak hands when brokerage loans expand faster than market values, thereby indicating smaller margins Furthermore, lax margin requirements permit speculators to buy more stock with a given amount of their own funds, so that they can influence or manipulate a market more readily. These two points can be more readily visualized by stating the situation for a speculative pool with $100,000 when it is allowed to borrow 90, 75, and 50 per cent—that is, allowed to use 10, 25, and 50 per cent margins, respectively.

	Margin Required		
	10%	*25%*	*50%*
Owned funds, or margin	$100,000	$100,000	$100,000
Total purchases possible	$1,000,000	$400,000	$200,000
Profit or loss from a one per cent fluctuation	10%		

The policy of higher margin requirements following the enactment of the Securities Exchange Act of 1934 has had the tendency, then, to make the market less subject to attacks of technical weakness, which formerly attended even moderate price reactions. On the other hand, the activity of speculators has been reduced, so that markets are less active than they otherwise might be. Less activity, in turn, means that a large buying or selling order is more likely to upset market equilibrium. Market commentators point out that prices move more erratically between transactions than formerly even in popular and relatively active stocks. A technical difficulty arises in setting up a reasonable margin rule because of differences in the stability of different stocks, which would legitimately mean different margin requirements. Because of the difficulty such differences are generally ignored by the rules. Similarly, a dealer who has frequent turnover of his holdings would seem justified in seeking a lower margin than might safely be set up for a longer-term speculator.

More difficult and questionable is the idea of varying margin requirements so as to stiffen them in boom periods and relax them in

depression times.[13] If such a policy were applied, it should tend to mitigate somewhat the more extreme fluctuations of the market. The practical difficulty can be best appreciated by raising the question as to when during the prolonged stock market rise of 1922-1929 a stiffening of margin rules would have been desirable, and when and to what extent a relaxation would have been appropriate in the market decline of 1929-1933. A Government-appointed board or commission might well hesitate to accept the responsibility of checking stock market "prosperity," or, if it decreed lower margins too early in a depression, the responsibility for subsequent losses by those who would claim that the reduced margins had been an invitation to speculate.

Listing. The securities which are admitted to trading upon an organized exchange must first be passed upon by the exchange authorities, after which they are said to be listed. Exceptions are sometimes made on the lesser exchanges for what is termed the "unlisted" trading privilege. In the case of the New York Curb Exchange this practice was characteristic in the early days, when trading took place on the street in the stocks of a number of large corporations which were unwilling to take the steps required to list on the "Big Board." This acceptance without formal listing is currently the subject of critical attention by the Securities and Exchange Commission.

Formal listing is a privilege extended after an application has been made by the corporation, which may list all or only certain of its capital issues. A company might list its common stock but not its bonds, or vice versa. The chief requirements made of the company are as follows:

1. Certified copies of the charter and by-laws must be submitted. This information makes such matters as the amount of stock, the rights of various stockholders, voting privileges, annual meetings, and the like a matter of readily accessible public record.

2. Financial and historical facts of investment import must be disclosed. Of interest are the founding, the growth; the properties, the products and markets, and the personnel. The required balance sheets and earnings statements for a period of years have to be prepared by independent auditors. Relations with subsidiary or affiliated companies must be disclosed. An agreement is made that suitable financial statements will continue to be published in the future.

3. The distribution of the issue must be described. Those who

[13] In a minor way this idea was the basis of the initial rule set up by the act (Sec. 6), which permitted larger borrowing on those securities which had not risen greatly from depression lows. Brokers were permitted to lend the higher of 40 per cent of the market price or 100 per cent of the lowest price during the preceding 36 months if this price was not more than 75 per cent of the market price.

propose listing must show that a substantial part of the issue is widely held, so that the exchange authorities can feel reasonably assured of a free and uncontrolled market. A closely held issue might be subject to manipulation.[14]

4. Transfer facilities must be maintained. The corporation must agree to hire the service of a suitable independent transfer agent and registrar, so that transfers of title can be quickly effected in the city of the exchange. This procedure also reduces the danger of fraudulent or improper issuance of a certificate. Special engraving is also required, in order to minimize the possibility of a forged certificate.

While an organized exchange takes these precautions before permitting trading in its listed securities, it does not in any sense guarantee their quality. Its function is merely to provide a free and open market for legitimate securities ranging from the highest-grade Government bonds to the most speculative common stocks. Issues have been listed which have never paid a dividend over the life of the corporation. The survey of the Committee on Stock List is designed to bar companies which may be tainted with fraud, companies not out of the promotional stage, and those whose securities are not widely enough distributed to insure a free market.

Maximizing the usefulness of the exchange. The stock market, then, is not a place for the newly established corporation to raise funds. In the preceding chapter, we saw how bonds and preferred stocks are usually sold to investment bankers for distribution. The exchange is chiefly useful in helping to distribute common stocks and prior securities convertible into common stock to whatever extent they are not taken up by existing stockholders. But funds are more easily and cheaply raised from any source when a record has been made familiar to the investing public, as is most readily done by listing. Even if the corporation management did not feel the need for thus maximizing the credit standing of the company to make financing possible whenever desirable, there would be its responsibility to the owners of the business. These stockholders have a right to expect that every action will be taken that will make their securities as valuable as possible. With this idea in mind the management should utilize the exchange facilities to their maximum usefulness.

The most important measure is the frequent and timely release of significant information. Because of public interest in listed secu-

[14] Among the rare occasions upon which stocks are forced off the list by the governors of the exchange is when a corner drives market price sky-high and discloses the absence of a free market. Stutz Motors (1920) and Piggly Wiggly (1923) are examples of stocks cornered by controlling interests and subsequently dropped from the New York Stock Exchange list. See J. E. Meeker, *The Work of the Stock Exchange* (New York: Ronald Press Company, rev. ed., 1930), pp. 604-605.

rities such facts have news value and serve to advertise the corporation in financial circles. An ever-increasing number of corporations are releasing quarterly earnings reports. Some publish monthly sales figures. Carefully prepared annual reports that disclose essential details, accompanied by an independent auditor's certificate, are helpful. Announcements are also appropriate for new property purchases, construction of new plants, and new products or models. With the expansion of investment counsel services, the advantages of such helpful publicity are multiplied. Security holders have a right to expect that bad news will be reported with equal promptitude. Even adverse news has its useful side. While it distinctly discourages the short-term-speculator and lowers security prices, it often has the merit of attracting the bargain-hunting investor or long-term speculator who regards these conditions as temporary and so as buying opportunities.[15]

A second useful policy is the maximum possible employment of common stock in the capital structure, particularly in the case of smaller corporations. The greater use of common stock enlarges the size of the outstanding issue, which will tend to make the issue more active and so more marketable. As pointed out elsewhere (p. 198), this policy has the advantage of preserving credit for use either in bank borrowing or for selling a bond issue to meet some financial emergency.

A third measure is the division of the share capital into a suitable number of units, so that the per-share price will be attractive. Although any student of corporation finance should be able to demonstrate the fallacy of calling a stock with a low per-share price "cheap," there is a strong popular tendency to adopt that view. Many prefer to buy 100 shares at $25 per share rather than 10 shares at $250. This attitude results in a strong feeling that a market-wise management is very likely to divide up the shares whenever market price rises much above $100 per share so as to reduce the unit value.[16]

On the other hand, stocks selling below $10 per share are likely to lose investment caste, because of the feeling that they are "too cheap to be sound." Occasionally the reverse of a stock split-up is employed to raise the unit price, but management hesitates to follow a course that might lower the total market value of holdings by raising the unit price, preferring to hope that improvement of financial standing will cure the low price. One aspect of this popular feeling

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[15] Evidence of this tendency is found frequently in the expansion of stockholder lists during periods of declining stock prices. Some of these additions may, however, represent stock previously held by the same individuals in brokers' names on margin accounts and now paid for and taken down as business clouds lower.

[16] Split-ups are discussed more fully in Chapter 22.

is illustrated by the common practice of commercial banks of deliberately allowing their shares to grow in value through retained earnings without split-ups whenever they are not intent on encouraging wider distribution of their stock. A high per-share price helps to give the institution the desired aura of great wealth. Mining ventures, on the other hand, frequently create huge share capitalizations with a very low value per share, even under one dollar per share, so that a speculative buyer is able to enjoy a feeling of opulence from the large number of shares he can purchase."

Economics of the Exchanges

Exchanges as markets. In concluding any discussion of the exchanges, it is desirable to indicate their place in the economic life of the community as well as to analyze some common misconceptions. They must be thought of as market places. Their value lies in the way in which they facilitate the buying and selling of stocks and bonds and so lower the cost of these operations. These property instruments, made more uniform in character and convenient in unit 'price by the corporate form of organization, are made more liquid by the central markets. As Berle and Means so aptly say: "The market is the paying teller's window." [18] In a more primitive society silver, gold, and precious gems offered the few who were able to acquire them a non-interest-bearing storehouse of value. Present-day industrial capitalism offers the lure of possible interest and dividends if the individual will put his savings into the instruments of production for society. Since the currency of a moderately well-governed country offers a more perfectly liquid (price fluctuation being nil) storehouse of value, some hope of income or gain is necessary to induce this conversion of savings into securities. The exchanges, by making the process work more smoothly, tend to lower the inducement necessary to get private funds into stocks and bonds.

A peculiarity of this market is that it is largely "secondhand," which is what would be expected from the fact that the annual "production" of new securities is always small in relation to the total in existence. Sometimes, the stock exchange is referred to as a "fixed capital" market, although strict analysis would show that the terms *fixed* and *capital* are both inaccurate. As long as the markets were predominantly interested in railroads and the utilities, the securities issued were supported by fixed assets, but the stocks and bonds of the great manufacturing and merchandising corporations are supported by major amounts of current as well as fixed assets. Such

" The mining listings on the Toronto Stock Exchange provide numerous illustrations. It is not unusual to find over 100,000 shares of one of these "penny stocks" traded in a single week.

" A. A. Berle, Jr., and G. C. Means, *The Modern Corporation and Private Property* (New York : The Macmillan Co., 1933), p. 299.

issues are in the strict sense "fixed" only as they are the long-term or permanent obligations or liabilities of the corporation. With the growth of the market for industrial securities, the field of the commercial banker has been invaded, so that a sharp dividing line is unreal. On the other hand, where banks make real estate or collateral loans, they may, in turn, be indirectly supplying funds for fixed assets. In individual cases, bank loans made to corporations whose balance sheets show the debt to be suitably supported by current assets may nevertheless be used to acquire fixed property.

While the "ideal" self-liquidating bank loan to finance inventory or receivables may have distinct advantages to the individual bank, it is apparent that any attempt at contraction of their total on a national scale will require (a) corporate savings (or retention of earnings by the borrowing business), or (b) a sale of corporate securities, unless (c) the process of shrinking loans results in a reduction of bank deposits and the general price level, so that the same volume of business activity can be conducted with a smaller volume of bank loans. The third possibility, with its falling prices, makes commercial enterprise so hazardous to profits that it is almost inevitable that the physical volume of industry will shrink Under the circumstances the forced contraction of even strictly commercial loans on a national scale is likely to be a painful process. Consequently, the term *self-liquidating* is applicable to commercial loans taken individually rather than as a whole and in the broad economic or social sense.

The reference to stocks and bonds as "capital" by some economists is also inexact. This usage is the result of identifying the securities with the assets which support them and overlooks the difference between the value of the two. In the accountant's balance sheet the securities and properties will balance, but in the market place the securities may sell for much more or much less than the tangible assets behind them. When stock is worth more than the sum of the supporting assets, the difference is explained as "goodwill," the power of the assets taken as an aggregate to produce a return that is above economic normal. But at other times securities will sell below the sum of the supporting assets, even when the latter are valued at replacement instead of at the cost figure, which is commonly carried on the book of accounts.

A full discussion of the economics of this phenomenon is not possible here, but it may be said that a large part of the answer may be found in the immobility of "economic capital," which prevents it from flowing into and out of business readily. The point is obvious in the case of bricks and mortar, but it is also true to some extent even with the current assets. It suffices here to call attention to the fact that stocks and bonds represent property rights in various

corporate pools of assets and that the distinction between the two is of the utmost importance in many cases of economic reasoning. It is easy to find particular corporations that for years are able to show earnings that make their securities worth two and three times their tangible asset investment. Many others continue for years to make so little that the reverse is true (for example, the railroads). The latter class may continue to operate as long as income is sufficient to cover expenses other than a return to investors."

The exchanges, then, are markets for instruments representing property rights in corporation assets, whose aggregates of value are determined primarily by the prospective earning power of the corporations as going concerns. The assets of corporations as a whole are predominantly fixed, but in the industrial group they are to a large extent current. As corporations are able to appeal for funds successfully in the security market, they may use the resulting cash to repay bank loans. With the marked expansion of time, or savings, deposits by commercial banks after 1920, a market was created that made the conversion of bank loans into bond issues increasingly logical. The popularization of common stocks in the late 1920's made it easy for major industrial corporations to free themselves completely from both bank and bonded debt. In many situations, then, bank loans and security issues are alternatives for financing a certain part of the corporation's requirements. On the other hand, the collateral loans of banks supply security buyers the means of purchasing stocks and bonds.[20]

"The chasm between property rights and economic capital is much more marked in the field of civil finance Government bonds are used typically to finance immediate consumption, war being the most common cause of national debt. Even when the proceeds of bond financing are used for long-term improvements, as in the case of most state and municipal bond issues, so that the debt has tangible asset support, the interest payments usually depend not upon revenues from the property but upon the ability and willingness of the state to coerce its citizens into contributing taxes. The greater use of the "benefit" basis of taxation instead of the more common "ability" basis would bring civil finance into a closer parallel with corporation finance.

[20] A point frequently ignored is that collateral loans may be for short-term purposes even though the security is stocks and bonds. It would be a similar blunder to class a bank loan to a locomotive manufacturer or a building contractor (that is, a loan to carry inventory) with a loan to a railroad for purchasing operating equipment or to a home owner to finance a residence. The point has been aptly stated thus: "The next question refers to the effect on commercial banking of excessive financing by means of stock rights where subscribing stockholders require funds necessary to take up their rights by collateral borrowing at commercial banks. . . . There is nothing inherently wrong in this method of financing so long as the borrower sets out to liquidate his loan within a normal period." R. E. Badger and Carl F. Behrens, "Financing by Stock Rights," *Investment Banking,* April, 1931, p. 39. These writers add: "Experience has proved that any particular collateral loan by itself may be liquid, but a wholesale reduction in collateral loans by all banks may prove to be a painful process." A similar statement would hold true for the orthodox commercial loan.

This curtailed discussion should indicate how indefinite is the dividing line between the fields of the commercial banker and the investment banker and the manner in which they overlap.

Criticisms of exchange functioning. Since the efficiency with which the exchanges operate is important, it is appropriate to consider briefly the criticisms and recommendations made as a result of an investigation by a Twentieth Century Fund survey group.[21] The findings were based upon conditions prior to the passage of the Securities Exchange Act of 1934, which legislation followed some of the proposals offered.[22]

1. *The control but not the elimination of margin trading.* The possibilities of this type of control were discussed earlier in this chapter. An interesting method proposed by this group was to supplement the customary percentage restriction on maximum collateral

TABLE 28

RESTRICTION OF MARGIN IN RELATION TO PAST EARNINGS

Average Earnings as Percentage of Market Price	*Maximum Borrowing Allowed*
10%	100%*
8	80*
6	60
5	50
4	40

* Note that the second restriction in the rule would make the maximum 60 per cent.

loan by a further restriction on loans on common stock in relation to an earnings standard. The recommendation read: "It is tentatively suggested that the maximum loan value of a share of stock should be twice the aggregate net earnings applicable to that share over the five years next preceding the date of the loan; providing, however, that this loan value shall in no case exceed 60 per cent of the current market price."[23] Twice the sum of five years' earnings would be the same as ten times the average for the past five years. The extent to which it would restrict collateral loans would depend upon how high stock prices rose in relation to the average of past earnings as illustrated by the figures shown in Table 28.

Such a rule would be chiefly restrictive in a period when prices were extremely high in relation to demonstrated earnings. In the

[21] Twentieth Century Fund, Inc., *The Security Markets* (New York: The Fund, 1935). A brief preliminary summary was published under the title *Stock Market Control* (New York : D. Appleton-Century Co., 1934).

[22] These recommendations of the survey are found in Chapter XVII of the first reference in the preceding footnote.

[23] *Ibid.,* p. 679.

case of those individual stocks the rule would be most severe where *current* earnings were much higher than their *average,* for the market tends to give most weight to the performance in the most recent years. The phrase "earnings applicable per share" would require interpretation because of accounting differences and capital structure changes, which would mean that such a rule would create an administrative problem. For this reason and the fact that the rule makes no allowance for differences in investment quality that justify different rates for capitalizing earnings to arrive at investment value, the idea is not likely to be adopted. However, the principle behind it may guide those who administer margin control. They might adopt higher margin requirements in periods when stocks are generally high in relation to the earnings record and relax them in periods of low market prices.

2. *The restriction but not abolition of short selling.* A short sale is made by instructing one's broker to sell a stock which one does not own. In order to do this, the broker borrows the shares to be sold, and the seller hopes to be able to buy them back at a lower price in order to profit. Since the majority of speculators—especially amateurs—speculate for rising prices, the short seller is the ogre of Wall Street. On the grounds that short selling is rarely of important size and helps to maintain a free market, the survey group did not recommend its prohibition. It was suggested, however, that the exchange authorities expand their general rule against the prohibition of trading that would demoralize the market to cover excessive short sales. Thus, short sales of unusual size in individual issues within the limits of a single trading day would be deemed upsetting to market equilibrium. Public statistics 'on the size of the short account were also recommended.

3. *The complete separation of the work of brokers and traders.* The possible conflict of interest which may arise when a single person occupies a position of agent (broker) and principal (dealer) has already been pointed out, as well as the rules of the New York Stock Exchange to safeguard customers in such cases. The fact that a specialist who acts as a special broker in a certain security may be able to improve the market in that issue by occasionally acting as dealer indicates that the rule might work hardship on the public. The Securities and Exchange Commission, which has given this idea consideration, has thus far considered it inexpedient to order a segregation.

4. *The publication of more adequate data of general market interest.* Some of the chief data suggested were (a) the total amount of customers' debit balances—that is, the sums owed to brokers by their margin customers—(b) the size of the short position in various stocks, (c) purchases and sales of stock by officers and directors in

their own corporation, (d) options granted or exercised by officers and directors in respect to securities of their own corporation, and (e) the number of those who report dividend income, interest income, and capital gains and losses in their income tax returns by income groups. Such information is aimed at making for a market with more knowledge of its own technical position.

5. *The publicizing of pool activities.* In spite of the apparent hostility of this survey to any group attempt to influence price, even in the case of market support for a newly underwritten issue, the only measures proposed were aimed at giving publicity to all such pool activities.[24] Undoubtedly public knowledge of the presence and activity of pools, together with fuller information about corporate affairs, would do much to curb the activity of manipulative groups. Secrecy and mystery are a great help to the latter.

On the other hand, publicity should not interfere with the work of distribution by what Wall Street commonly distinguishes as "legitimate" pools. Two types of operation are looked upon as "legitimate" by the financial community. In the first place, a group may regard a stock as undervalued in the market and accumulate a block from open market purchases to be sold at an advance; a second operation would be the sale of a block for some large holder who might find it difficult to sell so many shares in an ordinary unsponsored market without breaking the price. As long as the information given out by the pool operators is accurate, and the price at which the stock is sold is not out of line with other securities of like character, the process may be regarded as very similar to ordinary merchandising. To argue that all kinds of market sponsorship are "manipulation" is akin to identifying all selling effort as fraudulent. Under such reasoning the only fair market would be an auction market where no salesman was given an opportunity to seek out suitable buyers and push the merits of the offered wares. It should be apparent that a stock pool can operate very much in the same way as an investment banking syndicate. The tests of legitimacy would seem to be the same for both: Are the methods of distribution employed deceptive or informative? Is the security excessively or fairly priced when judged in the light of the then current market conditions?

The recommendations of the Twentieth Century survey group constitute an attack upon abuses of the exchange rather than upon any evil inherent in its nature. Some, however, have raised the more devastating query as to whether or not the very virtues of the great security marts do not make them a source of danger.[25] The

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Ibid., pp. 687-691..

For a vivid and colorful but sometimes loosely reasoned attack, see John T. Flynn, *Security Speculation* (New York: Harcourt, Brace Sr Co., 1934). A

very fact of ready marketability attracts a large following of both amateur and professional speculators whose interest is centered in the more fleeting price changes and many of whom lack both knowledge of and interest in the more fundamental long-run factors. But speculators can perform their economic function of stabilizing prices only by providing buyers at low levels and sellers at high levels. Actually they may prove too sensitive to the mood of the times, carrying a large volume of stock in feverish boom periods and dumping their holdings overboard in depressions, thus exaggerating price swings. Even over shorter periods, their inexpertness may prove their undoing and contribute to shorter-term fluctuations. Economic interest, which theoretically should keep them in check, is as ineffective as in the case of gamblers, who as a class always lose on the average to gaming houses.[26] Measures designed to curb the influence of such operators are likely to restrict the very "liquidity" that makes the market as valuable an instrument as it is. However, no disinterested person could regret such restrictions, provided only that they could be shown to be reasonably effective in saving such speculators from themselves. Such a measure would be a curb upon the use of margin trading by small speculators, who are likely, as a class, to be the least expert and the least able to bear losses. But demonstrably effective measures are hard to find.[27]

However, the most important economic losses are those that arise from the great tidal waves in the security market which run over periods of years and parallel the rise and fall of economic activity through the business cycle. (Note that great speculative cycles can occur without security markets, as in real estate.) These major changes in market value endanger the solvency of a banking system that makes collateral loans. They upset government budgets by producing capital losses that shrink the tax base whether the tax is levied upon income or property values. By their effect upon commercial sentiment they may extend the fluctuation in business ac-

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more academic analysis is given by A. A. Berle, Jr., and Victoria Pederson, *Liquid Claims and National Wealth* (New York : The Macmillan Co., 1934).

[26] This analogy leads some to argue that it would be better to legitimize gambling and let the Government take a toll. The resulting losses would not have the potent disturbing effect upon economic society of unskillful speculation. Others argue that legitimized gambling always takes an unhealthy proportion of social income and that even unskillful speculation canalizes the sporting instincts so that society has the use of the speculators' funds. Many projects of value have resulted from a willingness of speculators to assume risks in novel enterprises that might not have been initiated if purely investment standards had been applied. This argument is less applicable to speculation in already existing issues, such as are "listed," than to new capital issues for the promotion of new business ventures.

[27] For a statement of some proposed restrictions and the difficulties that lie in their adoption, see Twentieth Century Fund, Inc., *The Security Markets,* pp. 675-679.

tivity. Undoubtedly such broad movements in security prices contribute a share to the difficulties of an unstable economic mechanism. Such phenomena, however, are not primarily the result of stock market manipulation but rather of mass psychology superimposed upon more deeply seated maladjustments, of which the market is a reflection. These troubles may be due to economic overexpansion of railroads, of utilities, of industrial equipment, or of real estate, or to the improper inflation or deflation of bank credit. Whatever the major factors, the markets should hardly be blamed for mirroring more fundamental troubles. The disease and not the symptom must be attacked. Our difficulty is likely to be that diagnosis is uncertain because of a complex of several ills. The security markets are like many other devices that increase speed and effectiveness but also increase the gravity of disaster if the machinery is badly directed.

CHAPTER 16

SALE OF SECURITIES BY PRIVILEGED SUBSCRIPTIONS

WHEN financing becomes necessary for a going corporation, stock may be sold either because borrowing seems undesirable or because stock appears the easiest and least expensive method of obtaining funds. Sometimes, as will be indicated later in this chapter, the right to subscribe to such new issues may even add to the attractiveness of the existing stockholders' investment.

The Pre-eruptive Right

Because of the stockholders' right to subscribe to new stock issues before they can be offered to outsiders, sale by "privileged subscription" is the most common method of selling such securities. Something of the relative importance of this method of obtaining funds can be seen from Table 29, which gives data on large issues of bonds and stocks by corporations.

TABLE 29

CORPORATION SECURITY ISSUES: 1926-1930
(in millions)

Year	*Common and Preferred Stocks by Subscription Rights*	*Common and Preferred Stocks by Public Offering*	*Bonds*	*Total*
1926	$ 801.2	$ 921.9	$4,857.0	$ 6,580.1
1927	1,442.4	1,205.8	6,813.3	9,461.5
1928	2,399.5	2,538.5	5,132.2	10,070.2
1929	4,205.0	3,829.9	3,375.1	11,410.0
1930	1,135.2	745.0	4,686.2	6,566.4

Source: Standard Statistics Co., *Standard Trade and Securities,* January, 1932, p. 49.

This legal pre-emptive right is a matter of common-law doctrine rather than of statutory enactment. [1] It grows out of the principle

[1] Several states have provisions dealing with rights in their general incorporation acts. Indiana and California negative the common-law doctrine by specifically stating that no shareholder shall have any pre-emptive right unless that right is reserved in the corporate charter. The Ohio law allows for the waiver

that a stockholder must be allowed to share in new stock issues primarily in order that he may preserve his proportionate share in the voting control of the corporation and secondarily in order that he may preserve his equity in surplus where the new stock is to be offered at less than its current value.

Preservation of relative voting power. Should the directors have the power to offer voting shares to outsiders, the existing stockholders might lose their power to control the corporation, or, in the case of cumulative voting, their proportionate representation on the board. Thus, under the ordinary voting arrangement the owners of 52 per cent of the voting stock can elect all of the directors, but, if the stock outstanding were doubled by the sale of shares to others, their former percentage would be changed to 26 per cent of the voting strength and would thus be cut in half. Granted their pre-emptive right to subscribe to their prorata share of the new issue, however, these stockholders can maintain their majority of the voting power.

With the creation of nonvoting classes of stock, particularly preferred issues, it becomes logical to deprive such shares of their pre-emptive rights to subscribe. Otherwise the very object of the privilege is violated, because, if nonvoting preferred can buy shares, the established proportions of voting strength can be altered by a new common stock issue. In most of the important commercial states nonvoting classes of stock may be created, and such stock can be denied pre-emptive rights by means of suitable provisions incorporated in the charter. On the other hand, since such an issue of nonvoting stock would not effect voting control, it would be equally reasonable to make specific provision that such a security might be sold publicly, in the same manner as bonds, rather than be offered by rights to existing common shareholders.

A special case exists when nonvoting securities are issued that can be converted into voting stock. The resulting conversion of, say, a block of convertible bonds into common stock might upset an existing balance of power. For that reason, the general principle is to offer all such convertible issues by giving pre-emptive rights to voting shareholders.

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of the right by charter provision and reads: "Except as otherwise provided in the Articles, the holders of the shares of any class of a corporation, except shares which are limited as to dividend rate and liquidation price, shall, upon the sale for cash of shares of the same class, have the right, during a reasonable time and on reasonable conditions to be fixed by the board of directors, to purchase such shares in proportion to their respective holdings of shares of such class, at such price as may be fixed in the manner herein-before provided." The Illinois corporation law provides that "the preemptive right of a shareholder to acquire additional shares of a corporation may be limited or denied to the extent provided in the articles of incorporation."

To what extent this general rule has been embodied in the corporation statutory law and the court decisions of a given state must be determined by examination. Court decisions have not always been free from conflicting opinions, and much can be done in the way of clarification by making the charter and bylaws full and clear and by avoiding tricky varieties of security that are not readily classifiable. Some states, in their efforts to give promoters complete freedom of action, now specifically permit the corporation to use charter provisions whereby the stockholders permanently waive their pre-emptive rights.[2] Under such charters the directors have complete power to sell new stock to the stockholders or the public. The argument in favor of such extreme freedom is that in many corporations voting control has become so widely distributed as to be of minor interest to the holders of a majority of the stock. Management in such corporations survives by its success in obtaining proxies. The absence of the pre-emptive privilege permits the management, in those corporations which choose to avail themselves of this clause, to act more expeditiously and with less formality in financing by a sale of stock.[3] But those who study the ever-diminishing basic rights of the stockholder under the charter-mongering activities of states seeking the fees of incorporation are inclined to regard this departure as of very doubtful value to the corporation and dangerous to the best interests of stockholders.

Preservation of share in surplus. The second reason advanced for the pre-emptive right as a principle necessary to preserve the reasonable rights of the stockholder is the matter of maintaining his proportionate interest in his investment in the corporation. This point will receive our more thorough consideration later in a discussion of the valuation of these rights, but a simple illustration here will show the general principle which might make it unfair to offer new stock to outsiders. Suppose that a corporation has stock with a par value of $100 and an accumulated surplus of $20 per share, as is indicated in the condensed balance sheet illustrated on the following page. For the sake of simplicity, it may be assumed in

2 For example, Indiana, California, and Delaware. Probably in other states such a waiver of rights can be effected by the incorporation of suitable provi-Sions in the charter in the absence of a statutory prohibition. Since at the time the charter is adopted all the shareholders connected to it and every person who subsequently purchases stock is charged with knowledge of the contents of the charter, every stockholder has notice of such limitations and Consents to them by purchasing stock.

A further argument in favor of statutory permission to make the pre-emptive right optional with the board of directors is that it solves difficulties Created where the capital structure consists of several classes of preferred and common stock with various preferences, rights, and limitations of voting power. Sounder advice might be that corporations avoid such complex and often deceptive varieties of securities.

addition that the book value and the market value of the stock are the same.

Assets	$150,000	Liabilities	$ 30,000
		Capital Stock (par $100).	100,000
		Surplus	20,000
	$150,000		$150,000

As is so commonly the case, new stock is offered for less than its current value in order to make subscription attractive. A new issue of 1,000 shares doubles the outstanding capitalization when it is offered at $100 per share. The new balance sheet will show an increase in cash and of capital stock of $100,000, and other accounts will remain unchanged. Since the surplus is now spread over twice as many shares as before, it amounts to only $10 per share. The new stockholders have paid but $100 fora $110 investment, and the old stockholders have had their investment whittled down from $120 to $110 per share. If the new stock is sold to the public, property rights have been transferred to outsiders, but, if the new stock is sold to the existing shareholders, their investment has been kept intact. The decline in average value per share is merely the effect of their increasing their holdings with a lower investment per share. The pre-emptive right allows the stockholder to avoid losing a share in the corporate surplus to some outsider.

However, the illustration above is based upon a capital structure with but one class of stock. The ordinary nonparticipating preferred stock has no equitable interest in the accumulated surplus save as a general buffer against corporate misfortune.[4] Its position is analogous to that of bonds. To give the preferred stockholder the right to subscribe to new issues of common at a discount from its current value is almost as much of a hardship to the common stockholder as a similar offering to an outsider.[5] The value of the common stock would be reduced for the benefit of the preferred, and the reduction would amount to a bonus to the latter over and above the stipulated fixed dividend. As a result, the pre-emptive right is generally denied to preferred stocks. For the corporation with a large list of stockholders the question of participation in earnings is so much more important than that of voting that even a voting pre-

Participating preferred might also be thought of as having no interest in "surplus" because by definition its participation is in dividends, which are thought of as coming from current earnings. But surplus *per share* tends to increase the earnings per share which make "extra" dividends possible. Dilution of surplus by common stock issues at low prices dilutes the value of participating preferred as well as common. There is also the subsidiary point that participating preferred may have a share in surplus in the event of dissolution.

'In theory, it might be argued that the allurement of this right might enable the corporation to sell its preferred stock with a lower dividend rate, so that the common stock would save in prior charges the equivalent of the present valuation of the future rights to the preferred stock. See footnote 6.

ferred stock would be likely to have no pre-emptive right unless the law of the state of incorporation forbade the withholding of the privilege.

The generally reasonable course is to reserve the pre-emptive right for the common stock except in those unusual cases where the preferred is participating or where the preservation of a nice adjustment of voting power between preferred and common shareholders is desirable, as in certain close corporations. For the latter type of situation a more logical arrangement would be the separate election of directors by each class of stock, with a predetermined quota allotted to each group. Since any increase in the common stock that increases the voting power of that class over the preferred at the same time builds up the protecting investment that shields the latter, the relative voting influence of the latter could reasonably be allowed to decline.

In special cases the privileged subscription might be extended to the preferred shareholders in order to broaden the market somewhat for new issues and thus increase the success of the common stock financing. When a corporation is expanding rapidly, this consideration, plus the possible wish to give the preferred stock itself a special appeal that would improve its market price, might be important.[6] These considerations favorable to rights for preferred stock are usually less weighty than those which would make it appropriate to limit the privilege to the common stock. The same principles of equitable treatment would require that securities convertible into common stock should be offered by rights to the common shareholders. On the other hand, most preferred stocks, being nonvoting and nonparticipating, may logically be offered like bonds for public sale rather than by rights.

Stock not subject to rights. In certain cases issues of common stock by a corporation are not subject to the pre-emptive rights? These exceptions to the general rule are as follows:

1. A continuing sale of the original issue. During the founding of a corporation its officers may continue the sale of shares until financing has been completed. No established proportions of voting power or interest in accumulated surplus have arisen that would give logic to rights.

Middle West Utilities Company, Insull's billion-dollar utility holding company, gave subscription rights to preferred stockholders which raised their, stock above its investment value. The company had a speculative appeal and during its rapid expansion in the decade of the 1920's was in need of a large supply of new funds.

See Victor Morawetz, "The Preemptive Right of Shareholders," *Harvard Law Review,* December, 1928, p. 186; A. H. Frey, "Shareholders' Preemptive Rights," *Yale Law Journal,* March, 1929, p. 563; H. S. Drinker, Jr., "The Preemptive Right of Shareholders to Subscribe to New Shares," *Harvard Law Review,* February, 1930, p. 586.

2. Treasury stock. Stock that has been reacquired for the corporate treasury by purchase or by donation is also at the free disposal of the management to use as seems best in the corporate interest.[8] It can be sold in the open market or to employees, and the matter of rights need not be considered.[9]

3. Issue of stock for property. Authorized but unissued stock may also be issued directly in order to purchase property for the corporation. Such an issue might, however, be set aside if it could be shown in a court of equity that the property acquired was not reasonably worth the stock to be issued for it. In deciding such a case, the court might be influenced by par value and book value, regarding the higher of these as a minimum value to be obtained for the stock. A more rational approach, however, would be to decide whether the property acquired was reasonably worth at least the fair investment value of the stock to be given in exchange." In this, as in other situations, a court would also halt an issue if it could be shown that the directors were using this device to conceal an indirect plan for capturing control of the corporation.

Special occasions may arise when the company finds it desirable to sell stock to employees in order to encourage morale. Or it may wish to give an option to buy stock at a future time to certain officers as an incentive or as partial compensation to obtain their services. When no treasury stock is available, the stockholders may waive their rights for a sufficient amount of stock to care for these needs.

Financial Aspects of Privileged Subscriptions

Technique of issuing rights. When a block of stock is to be sold by privileged subscription, certain preliminary steps will first be taken: suitable action by the board of directors and by stockholders, registration with the Securities and Exchange Commission and any state commission that has jurisdiction, possibly the negotiation of an underwriting agreement, and notification of the exchange authorities if the stock is listed. A date is set on which a list of stockholders to whom the rights will be sent is made up. Anyone becoming a registered holder thereafter acquires his title "ex-rights"

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[8] In 1925 the American Telephone & Telegraph Company donated back $10,000,000 of common stock to its subsidiary the Pacific Telephone & Telegraph Company. The resulting surplus was used to write off intangible assets. The stock was then available for resale.

[9] If the amount of treasury stock were large and had been held for some time, a court might hold that it was subject to the pre-emptive right, especially were it to affect substantially either the voting control or the old stockholders' equity in surplus.

[10] The principles involved are discussed in Chapter 24, which deals with mergers.

—that is, without any claim to share in the privilege of subscription. After a short period, comparable to the interval that elapses between the ex-dividend date and the issuance of the dividend check, the stockholders will receive a transferable certificate called a *stock purchase warrant.*

These warrants are to be distinguished from the much less frequently used stock purchase warrants that represent long-term options to buy stock.[11] The latter are issued on special occasions and are not closely related to the immediate financing needs of the company.[12]

The warrant will set forth the number of shares which may be purchased by the holder, the price to be paid, and the latest date at which the right may be exercised (see Figure 11) . The warrant will be surrendered with the purchase price in suitable funds to the corporation or to a trust company acting as transfer agent for the company. Sometimes payment on the installment plan is permitted. In such cases the company may allow interest upon the balances paid in until the certificate is issued, because dividends are payable only after the issuance of fully paid stock. If the issue is a small one, the installment payments may be made payable shortly after dividend dates, so that the stockholder can use the dividends on his old stock to pay for the new. Not infrequently the cost of the new stock will be found to equal approximately the dividends for a period of a year to a year and one half.

The custom on the New York Stock Exchange is to speak of one right as the privilege which is received by the owner of one share of stock. Therefore, if the new stock issue were in the ratio of one to ten with the previously outstanding stock, ten "rights" would have to be acquired to exercise the privilege of subscribing for one full share. The term "Philadelphia right" is sometimes used to describe this right to subscribe to one full share. The latter and less employed term would seem the less confusing in the buying and selling of rights, but a price quotation for the "New York" right has the advantage of indicating the cash value of the privilege per share of stock enjoyed by the stockholder who chooses to dispose of his rights.

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[11] Examples of this type of stock purchase option are found in the perpetual warrants of the Niagara Hudson Power Corporation, Tri-Continental Corporation, and United Gas Corporation, all listed on the New York Curb Exchange.

[12] An unusual exception occurred when the Remington-Rand, Incorporated, common stockholders of record on June 10, 1936, received the right to subscribe to one additional share for each four shares held at $27.50 a share, one tenth of the right to be exercised by January 15, 1937, one fourth by October 1, 1937, one fourth by October 1, 1938, and the remaining four tenths by March 1, 1939. Failure to exercise the rights on any of the dates stated made the warrant void for further subscriptions.

No. ..... Right to subscribe for ..... Shares, being at the rate of one Share for each four Shares of Common Stock held.

THE CELOTEX COMPANY

FULL SHARE COMMON STOCK SUBSCRIPTION WARRANT

Right to Subscribe Expires at 3 P.M. Eastern Standard Time October 27, 1930
If not used for subscription before that time this Warrant will be void and of no value.

Chicago, Illinois, October 6, 1930.

This Certifies That *(Name of shareholder)* or assigns is entitled, as provided in this Warrant, and not otherwise, to subscribe for ..... Shares, without nominal or par value, of the Common Stock of THE CELOTEX COMPANY, a Delaware corporation, at the rate of $10.00 per share. Said right of subscription can be exercised only by the payment of the full amount of the subscription price of said shares at the rate aforesaid to CHEMICAL BANK AND TRUST COMPANY, at its principal office, No. 165 Broadway, Manhattan, New York City, in New York funds, or to CONTINENTAL ILLINOIS BANK AND TRUST COMPANY, No. 231 South LaSalle Street, Chicago, Illinois, in Chicago funds, at or before 3 P.M. Eastern Standard Time on October 27, 1930, and upon the surrender at one of said offices at the time of such payment of this Warrant with the form of subscription printed on the reverse thereof duly executed. All checks in payment of subscription must be certified and made payable to the order of CHEMICAL BANK AND TRUST COMPANY, of New York, or to the order of CONTINENTAL ILLINOIS BANK AND TRUST COMPANY of Chicago.

It is a condition of this Subscription Warrant, and every successive holder of this Subscription Warrant by accepting or holding this Subscription Warrant, consents and agrees, that title to this Subscription Warrant, when endorsed in blank, is transferable by delivery with the same effect as in the case of a negotiable instrument, and that The Celotex Company and its agents may treat the holder hereof, when so endorsed, as the absolute owner hereof for all purposes.

Upon surrender hereof, duly endorsed for transfer, before 3 P.M. Eastern Standard Time, October 27, 1930, at either of said offices, this Warrant is transferable and may also be exchanged for other full share Warrants representing the right to subscribe for a like aggregate number of shares of said Common Stock.

THE CELOTEX COMPANY

By E. B. Roberts ..... Secretary

Figure 11. Full-Share Subscription Warrant.

Many stockholders will have the right to subscribe to a fraction of a share, for which it is customary to issue separate fractional warrants. Since fractional shares are not issued for subscriptions, other fractions must be purchased and combined to make full units before they can be exercised.[13]

[13] These fractions represent small sums likely to be bothersome to regular brokers, and so a corporation may assist its stockholders in their purchase and sale. Thus, the Texas Corporation in February, 1937, informed stockholders that it had sponsored a partnership, Merlis & Company, which would buy or sell

Value of rights. As we have already suggested, rights are readily transferable and have a market value which depends upon the spread between the market price of the stock and the subscription price at which the rights are exercised. Thus, if the market price of the stock *after it has gone ex-rights* is $52 per share and the subscription price is $40, the rights necessary to purchase one share should sell for substantially $12. If six rights are required to purchase one share, each right would have a market value of about $2 ($12 ± 6). This relation may be expressed as follows:

$$\text{Value of one right} = \frac{\text{Market value of stock} - \text{Subscription price}}{\text{Number of rights to purchase one share}}$$

The actual market value of the right may vary somewhat from the figure expressed by this formula. Thus, in the case of the stock just mentioned, a speculator wishing to make a short-run speculation might prefer to buy the rights to subscribe for one share, which would cost $12, instead of investing in a share at $52. In case of a rise in the market for the stock he will make the same number of points profit on his $12 investment in rights as he would on a $52 investment in stock. Furthermore his maximum loss would be $12, whereas in the stock it could amount to much more. This point would have the greatest speculative importance when the market price is but very little above the subscription price instead of considerably above it, as in our illustration. (Note, however, that a 12-point decline would mean a 100 per cent loss on an investment in rights, and only 23 per cent in the stock.) This special speculative incentive to purchase rights might drive their price somewhat above what would be expected from the formula.[14] Should it move greatly out of line, however, stockholders who were intending to use their rights would change their minds and sell their rights to the speculators and buy the relatively cheaper stock in the market. On the other hand, the rights might drift slightly below their formula value under heavy selling, but the decline would be limited by arbitraging dealers, who would buy the rights and use them as a basis for selling stock (which they could obtain by subscribing with the rights) whenever the spread between the market for the rights

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single fractional warrants for stockholders to assist them in completing full rights for their subscriptions. Orders were executed on the basis of the mean of the high and low prices quoted on the New York Stock Exchange on the day on which the fractional warrants were received. No commissions or premiums were charged, the expenses of operations presumably being borne by the corporation as a matter of service to its stockholders. Orders for full rights were referred to regular brokerage channels.

"This speculative appeal permitted the Kelly-Springfield Tire Company rights in 1928 to have some market value after the stock itself had slid below the subscription price, so as to leave the rights without any value according to the formula.

and the stock became great enough to cover the cost of commissions and other expenses and yield a slight profit. The buying of these dealers would tend to raise the price of the rights, and their selling would tend to lower the price of stock, so as to bring the two back into the relation expressed by the formula.

After an issue of rights has been announced, but *before the stock has gone ex-rights,* the question arises as to the value of the privilege and the amount by which its issuance will reduce the market price of the stock. A simple illustration will show how these figures are found. Let us suppose that the right to subscribe to one new share of stock will inure to the holder of four shares, that his stock at the time of the announced financing has a market value of $125 per share, and that the subscription price will be $100.

The current investment in 4 shares @ $125 would be	$500
The additional investment in 1 share @ $100 would be	100
The value of the 5 shares should then be	$600
Or the average value of the shares after financing should be $600 ÷ 5, or	$120
With the subscription price at $100, the right to buy a full share worth $120 gives a value to 4 rights of	$ 20
Or a value per right of $20 4, or	$ 5

This illustration shows the change in the price of the stock which might be expected when the stock goes ex-rights. The stock is seen to decline by the value of one right—from $125 to $120 per share, so that the stockholder has the same total value as before.[15] Since the market is constantly fluctuating, the actual price on the day the stock is traded ex-rights may not be exactly $5 less than on the previous day, but it will be substantially that amount.

Before the stock goes ex-rights, the rights may be traded and valued on a "when issued" basis. By use of the reasoning in the above illustration, the following formula for the value of such rights may be obtained *before the stock has gone ex-rights.*[16] Upon substitution of the values in the illustration, it will of course be found that the right has the same value before and after the ex-rights date, if it is assumed that there is no fluctuation in the price of the stock.

" The formula for finding the market price of the *stock* "ex-rights" can be stated as $\frac{MR - S}{1}$ in which M represents the market price of the old stock, R is the ratio of stock outstanding to the new issue, and S is the subscription price of the new issue.

" The formula for the value of a right in the case of privileged subscriptions to convertible bonds instead of common stock would simply substitute the bonds convertible into a share of stock. The numerator would be the market value of the bonds convertible into one share minus the subscription price for that amount of bonds. In the denominator, unity would be added to the ratio of shares outstanding to the shares that would result from conversion of the bonds.

$$\text{Value of one right} = \frac{\text{Market price of old stock} - \text{Subscription price}}{1 + \text{Ratio of stock outstanding to new issue}}$$

Or, if symbols are preferred,

$$\frac{M - S}{1 + R}$$

The stockholder who has rights to purchase stock at less than market should either exercise his rights or sell them. If the period during which they may be used is allowed to pass without any action, the privilege lapses by expiration, and the warrant giving evidence of the right becomes valueless. Whenever rights are offered by a corporation with a considerable number of stockholders, there are always some who do not wish to buy more shares and, not understanding the sale value of the rights, do nothing to sell them. Others allow their rights to expire through inadvertence. Morawetz has argued that stockholders who allow their rights to lapse should be protected by the corporation whenever the subscription price is "materially below the market value." [17] Under this proposal, the directors would sell in the open market any shares not taken up through rights shortly after the termination of the subscription period. Any net surplus realized over the subscription price would be turned over to the shareholders or the assignees of their rights upon the presentation of unused warrants. The contrary argument would be that such protection would involve special, and possibly disproportionate, costs incurred for the sole benefit of a minority of stockholders, whose individual holdings are usually small. Further objections are (a) that such selling might serve as a depressant to the price of the stock at a time when the market has already been called upon to absorb the stock of those who sold their rights, and (b) that it would remove one source of possible compensation sometimes given to the underwriting syndicate which guarantees the success of the issue.

Underwriting. The corporation planning to offer securities through rights faces the question as to whether or not it should have the success of its offering underwritten. The advantages of having a syndicate of investment bankers agree to purchase any part of the issue not subscribed for by stockholders are much the same as when the syndicate purchases an issue outright." The corporation enjoys the certainty that the funds will be available as needed and has the benefit of the advice of the investment bankers. Also, stockholders who might hold back on subscriptions in the fear that an unsuccessful offering might adversely affect the corporation and the market are able to act with assurance.

" Morawetz, *op. cit.,* p. 191.

" For a discussion of these advantages, see Chapter 14.

Unlike a purchase of an issue, the responsibility of the bankers in an underwriting of rights is made contingent upon the failure of stockholders (or the buyers of stockholders' rights) to subscribe for the full amount of the issue. The amount paid to the underwriters to assume this risk is more in the nature of an insurance premium against unforeseen adversity, whereas the gross margin between buying and selling price on ordinary investment banking operations is largely payment for a merchandising service. The underwriters of an offering of rights, it is true, might publicize the forthcoming issue to the end of favorably influencing the market absorption of the new issue and might even direct the attention of customers to its merits. Or the syndicate might sell some of the stock short in the early part of the undertaking in order to have buying power to support the market at the time when stockholders not desiring to exercise their rights are most likely to be dumping them upon the open market.

In the old days, before the stern eye of the Securities and Exchange Commission was fastened upon the market, the underwriters might have formed a trading syndicate and employed stock market operators to engage in that type of market manipulation most likely to encourage buying of the stock by the speculative community. Currently, such activities would have to be conducted with such circumspection that they would not be deemed to be improper manipulation.[19]

Should the market price of the security offered decline to, or below, the subscription price, so that part, or all, of the issue was unsold, the underwriters would be obligated to purchase this balance and carry it as an investment until market conditions made it possible to dispose of their holdings at a satisfactory price. Unless otherwise bound by their underwriting contract, they might sell these holdings below the subscription price and take a loss rather than continue such a commitment for an indefinite period.

The possible value of underwriting to the corporation is illustrated in the following case of convertible securities, which fluctuate less than common stock but are often priced much closer to the going market value. In September, 1937, Bethlehem Steel Corporation offered its stockholders the right to subscribe at par for $48,000,000 of 15-year sinking fund 3+ per cent debentures at the rate of $15 of debentures for each share of stock held. The issue was underwritten by a syndicate of 25 prominent banking houses at a commission of $1\frac{1}{4}$ per cent on the original issue, plus $\frac{1}{4}$ per cent on all debentures unsubscribed for and taken over. Owing to the weakness of the securities market, only $1,996,700, or a little more than 4 per cent

[19] See the discussion on pp. 386-387 relative to legitimate versus illegitimate pools.

of the issue, was taken up by the stockholders. The underwriters purchased the balance and offered it unsuccessfully to the public at 952.[20]

The compensation in the way of commission or premium for assuming this underwriting risk will depend upon the likelihood of the syndicate suffering a loss. The uncertainty of the reception of a convertible bond or preferred stock, since both are unlike the common stock already held by the recipient of rights, would suggest that their underwriting was therefore more logical than a similar offer of common stock by rights. The conditions which govern probable success are discussed below and should be the determinants. The commission may be paid in stock. Instead of paying a flat rate on the total offering, the arrangement may provide for a rather low flat rate on the total amount plus a higher rate on that part of the issue which the syndicate is obliged to purchase. While this plan introduces a small element of uncertainty from the corporation's point of view, it has the merit of adjusting the compensation on the basis of the actual burden the underwriters are obliged to assume.

From July 27, 1933, to June 30, 1937, 94 issues of common stock were registered with the Securities and Exchange Commission and offered to stockholders by means of rights. Fifty-seven of the issues were underwritten. The average (modal) rate of compensation (per cent of subscription price) paid on the underwritten offerings, irrespective of the amount taken by stockholders, was 2 to 3 per cent. In 18 cases the underwriters received additional compensation of from 2 to 5 per cent on shares which they were obliged to take up.[21]

Underwriting by investment bankers is appropriate and probable only when the corporation has already established a reasonably wide market for its stock. This condition is likely to exist only when the stock has been listed or has an unusually broad over-the-counter market. For lesser corporations or for companies with a few stockholders some of the larger of whom are not desirous of increasing their investment, a straight sale of the new issue to the bankers is more logical. In such cases, preferential treatment may be accorded those stockholders who do wish to acquire their prorata share of the new issue. They may be given the same subscription price as the bankers, and the balance not so sold will be acquired by the bankers to be merchandised along the usual lines.

When a corporation is controlled by a small group of stockholders, they may be willing to underwrite the success of a new issue by

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[20] A more extreme case may be found in the Pure Oil Company convertible preferred issue in August, 1937. See p. 345, footnote 19.

[21] Compiled from Securities and Exchange Commission, *Statistical Series Release* No. 41, Item 1.

rights. It might seem simpler for these persons merely to absorb any unsubscribed stock, but a formal underwriting agreement has the advantages of assuring these larger stockholders that each will care for his share, reassuring the smaller stockholders as to the success of the financing, and avoiding the appearance of "taking advantage of the bargain stock" not bought by the stockholders who fail to exercise their rights. For similar reasons a holding company might underwrite an offering of rights to subscribe to a subsidiary's securities.

Conditions of success. The only condition essential to the success of an offering of subscription rights is that the market price of the security offered shall remain above the subscription price during the final days of the subscription period.[22] Should the market price decline below the subscription price, the holders of rights will find it cheaper to buy the security in the open market than by exercising their rights. A more penetrating analysis than the foregoing answer requires that we ask what conditions are likely to keep the market price from declining below subscription price in the face of the new supply of the security. These factors give a more complex but more fundamental statement of the conditions of success for this method of financing.

1. Relative size of issue. If the issue is small in relation to the existing investment of the stockholders in the corporation, they will find it easier to purchase the proposed additional securities. Stockholders are much more likely to absorb a 10 per cent addition to the outstanding stock than a 100 per cent addition.[23] For this reason, a corporation that can spread its expansion program over a period of years and so offer its rights in a succession of small amounts rather than in a single large offering is in a fortunate position.

2. Spread between market and subscription price. The greater the percentage spread between the market price and the price at which the rights permit subscription, the smaller is the probability that a decline in market price will cause the financing to fail. As we shall see later, there are objections in some cases to a consider-

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Another condition suggested is that market price must not decline below par value, but what is meant is that the subscription price must not be set below par. If market is below par, the corporation will find it necessary to lower or abolish par value in order to be able to set a subscription price that is below market.

" Dewing reports a study of 110 privileged subscriptions of 19 prominent corporations covering the period from 1911 to 1933 which showed the following distribution of ratios (expressed as percentages) of a new share allotted to each old share.

Per cent...	81	10	121	15	161	20	25	30	331	40	50	100
Number...	7	46	9	4	6	13	9	4	1	1	5	4

A. S. Dewing, *Financial Policy of Corporations* (New York: Ronald Press Co., 3rd. rev. ed., 1934), p. 1052, footnote u.

able spread being set between those two figures, but from the standpoint of insuring the success of the offering a substantial margin is useful.

3. Willingness of old stockholders to make further investment. The greater the willingness of the stockholders to add to their investment in the company, the less of the new issue the general market will be obliged to absorb. The less the market is called upon to take, the less likely is the price to be depressed. Steady or increasing dividends are likely to make satisfied stockholders and thus improve their readiness to buy more stock and to recommend it to others.[24]

Dewing argues that small stockholders are more likely to exercise their rights than are large holders.[25] Large holders, he suggests, are likely to feel that additional holdings will unbalance a planned diversification of their investments, while small holders will welcome the chance of buying stock "at less than it is worth" on the "installment plan," if the amount they are asked to take is not too large. There is also the distinction between those stockholders who are accumulating an estate and those who are spending all their income. To the extent that the wealthy are heavily taxed, they would have that much less income for reinvestment. Small investors who are accumulating an estate would be likely to use rights, but those who have reached the age of retirement would be likely to be living on their investment income and would not be desirous of making additional investments.

4. Breadth and firmness of market. In the preceding chapter on the stock market, the conditions were mentioned (pp. 379-381) that make it possible to offer considerable blocks of stock without producing large price declines. The more widely distributed a given stock and the more active the trading in it, the more likely is it to have the kind of a market which can absorb stock not taken by stockholders without suffering an undue drop in price.

An exceptional case was the offer of United States Rubber Company of rights to subscribe for one new share for each share held as of December 21, 1928, the rights to expire January 11, 1929. In this case 728,412 shares of common were added to capitalization at $25 per share. This common stock had paid no dividend since April, 1921; the preferred, after an uninterrupted record from 1905, had passed its dividend in February 15, 1928. The price range of the common was as follows:

	High	*Low*
December, 1928	48	38*
January, 1929	55*	42
Year, 1928	634	27
Year, 1929	65	15

[25] Dewing, *op. cit.,* pp. 1045-1046. The experience of such companies as the American Telephone and Telegraph Company and the Commonwealth Edison Company corroborates this opinion. These companies, which have large numbers of small stockholders, have enjoyed unusual success with rights financing.

5. *General stock market outlook.* When the general market is buoyant as a result of a rosy outlook for business and profits, new securities go well. When prospects are gloomy, however, any attempt to force the sale of a considerable block of stock is likely to depress price badly. At such times the forces which tend to keep stocks in reasonable alignment with one another are weakened, and, if the market cannot recuperate rapidly from the blow of having to take a large amount of unsubscribed stock, the price may drop to the point where the issue will fail.

Effect of rights on market action. The plain implication of the foregoing discussion is that the security market is an imperfect economic mechanism. If its operations were perfect, the only important change in the market price would be registered at the time the stock went ex-rights, and the decrease in price at that time would be exactly equal to the value of the right, which then acquires a separate existence. The mere fact that new shares are being offered should not depress price measurably, because a perfectly informed investment community would shift from other holdings if the market price of this particular issue fell below its fair investment value, thereby correcting the undervaluation. And, if investors were somewhat tardy in making this shift, speculators would presumably supplement such price-corrective buying and selling.

When stock market operators say that the technical position of a stock is weakened by issues of rights, they are stating that the market for the individual stock is imperfectly piped up with the great reservoir of investments represented by the general security market. Heavy offerings of a particular stock, instead of providing a minor but pervasive influence on the total market, may have a primary and concentrated effect on the price of the given stock. To a certain extent, then, depending upon the activity and breadth of interest in the particular issue, its market is partially independent and insulated.

The acceptance of this idea of an imperfect market has led to the general belief in the financial community that the market action of a stock over the short run is likely to be depressed somewhat by the sale of rights, especially during the period they are actually coming into the market—that is, between the sending out of the warrants and the expiration date of the rights. If the effect of this sale of rights is cumulative during the period of their sale, the stock and rights would have their highest market value at the beginning of the period and their lowest at the end. That this tendency is present (though by no means uniformly) is indicated by certain unpublished studies, the results of which are summarized in Table 30.26

[11] *Ibid.,* pp. 1056-1057, footnote cc.

Since large issues of the more prominent corporations tend to predominate in such studies, and the market for such securities is likely to approach the economic ideal, the results from a study of less prominent issues might differ.

Such short-term fluctuations are of less interest to the corporation than to the stockholder who wishes to buy or sell rights to the greatest advantage. If the third study, covering the most recent period (1918-1929) , can be regarded as the most typical for present conditions, there is not a great deal, to choose between the chances (46 to 39) of finding a higher market at the beginning and those at the end of the subscription period. Apparently the buying of satisfied stockholders, who tend to purchase rights and make payment at the end of the period rather than tie up money for an unnecessarily long time, is frequently more than enough to offset the adverse market influence of selling. (Possibly an increasing number have

TABLE 30

FLUCTUATIONS IN MARKET VALUE DURING PERIOD OF THE RIGHT TO SUBSCRIBE *

(Comparison of prices at beginning, middle, and end of period.)

Period Studied	*Number of Cases*	*Highest Values* Beginning	Middle	End
1906-1912	91	52%	22%	26%
1913-1925	215	47	33	20
1918-1929	191	46	15	39

* The first and third studies are based on the value of the rights; the second is based on the value of the stock.

learned the market maxim, "Sell rights early but buy them late.") A high price at the end of the subscription period is likely to be an index of the enthusiasm and confidence of the stockholders.

It is difficult to determine whether or not the market position of the stock is weakened over the longer term by the addition to the supply. One suggested measure is the degree to which the price of the stock recovers the price decline that occurs when the stock goes ex-rights, on the theory that buyers will ignore the cause of the decline and tend to regard the stock as cheap in the light of its previous market record.[27] Such a method of analysis might easily overlook the possibility that, if the right were regarded as a special "melon" by stockholders rather than a reduction of previous surplus per share, the evidence would appear in a rise in the price of stock

[27] Dewing states: "Brokers advise their customers to buy very desirable stock as soon as it has gone 'ex-rights' on the assumption that it will soon be selling on the same level as before the privileged subscription." He cites unpublished studies that would indicate that this assumption is false. The market action in the months following the ending of the privilege in one case showed somewhat more frequent decreases than increases in price, and in the other the reverse. *Ibid.,* p. 1058.

as the news came out, and the drop when the stock went ex-rights would merely carry it back to this previous level.

Actually it seems difficult to find any sound reason why the issuance of new stock should have anything more than a temporary "technical" influence upon the market except in so far as a dilution of value has resulted—a measure of which was expressed by the formula for relating rights to the value of stock. Whatever may be the shortcomings of the market in evaluating the worth of a stock, they are likely to last only a short time and be minor Over longer periods the market will represent the consensus of opinion as to the relative investment worth of the stocks listed.

The sweet reasonableness of this logic should not cause one to overlook the fact that the presence of frequently recurring rights may be the outward and visible sign of a condition of profitable expansion possibilities that will make the stock more attractive than that of a corporation without such potentialities. Nobody would be likely to regard the right to make deposits in a bank at a low rate of interest as a valuable privilege. If, however, one enjoys the continuing opportunity to invest in a corporation where the funds are able to earn 8 or 10 per cent, the privilege may have decided value, provided that in the opinion of the investor the estimated risk does not counterbalance this higher return. Herein lies an answer to the apparent anomaly of the high market values of some common stocks—that is, high in relation to either assets or earnings. Investors are paying a premium for the opportunity to invest further sums on an advantageous basis in the future.[28]

Such a course departs from pure investment in that it requires speculation as to the period and extent of the continuance of this opportunity to expand the corporation's assets advantageously. The economic risk of diminishing returns is always present. And the speculator may mistake a passing period of business prosperity for a permanent condition. The very ease with which management can raise funds under these circumstances is a strong temptation to expand plant and operations to a point that is almost certain to reduce the rate of profit. But this matter of consequences is secondary to our chief interest here, which is to explain why continuing "rights" are likely to be associated with stocks that show a high market value in relation to the customary standards of investment appraisal. Clearly the high price should be explained in terms of the more fundamental factor—the opportunity for continuing investment at a high return—rather than the superficial phenomenon

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" The same phenomenon in a different form occurs where the corporation, instead of issuing new stock, reinvests earnings that would otherwise be paid as dividends—that is, compounds the stockholder's income for him.

of frequent rights. Were the return "normal," the rights should have no power to raise value; if the return is high and likely to continue so under repeated additions to investment, the stock should sell for a price high enough to include the value of the current investment plus the present worth of the future investment opportunities.[29]

Rights as income. Another point of view that is much less accurate, but which deserves more consideration than is usually given to it, would regard rights as income to the stockholder, supplementing his dividends. This view is sometimes treated as one of the popular stock market myths, much as when stock dividends are referred to as "income."[30] The conventional view is that a stockholder who sells his "rights" is parting with a portion of his "capital" in much the same way as he would if he sold a part of his shares. The reasoning can be traced along the lines of the first illustration used in this chapter (p. 392) to show how the seller of rights is parting with a fraction of his equity in the net worth when the new stock is offered at less than its book value. The receipts from the sale are counterbalanced by a reduction in the value of his share. This argument takes the stockholder's position only *at the moment of time* at which his stock goes ex-rights. Table 31 gives the record of book value *over a period of time* of the stock of two well-known corporations which sold stock by giving rights on a number of occasions during the decade of the 1920's.

TABLE 31

ILLUSTRATIONS OF BOOK VALUE AND RIGHTS

American Telephone & Telegraph Company

	1920	*1921*	*1922*	*1924*	*1926*	*1928*	*1930*	*1931*
Book value (end of year)	$135	131	127	126	128	133	136	135
Market value of rights:								
Low		s	24	3	54	111	16	
High		s	48	4 3/32	64	164	234	
Offering price of new stock		$100	100	100	100	100	100	
Ratio of new offering to stock outstanding		.20	.20	.20	.166	.166	.166	

" The reader interested in the actuarial approach to this problem might note that the factor presented here is a discounting of a future privilege and is an "intangible asset" behind the market price of the stock over and above that included in the conventional concept of "goodwill." As the investor realizes upon this "capitalization of opportunity" in subsequent years by investing additional sums or selling his rights, the "opportunity value" disappears and, if the forecast is accurate, would be replaced by goodwill—that is, the above-normal return earned by the new funds which made the privilege of continuing investment valuable. The amount paid for this "opportunity value," plus compound interest to the date of realization, would be a part of the actuarial cost of the subsequent investments.

"See Chapter 22 for a discussion of stock dividends.

Commonwealth Edison Company

	1924	*1925*	*1926*	*1927*	*1929*	*1930*	*1931*	*1932*
Book value (end of year) .	$124	125	127	133	140	143	136	110*
Market value of rights:								
Low.		3*	4*	74	121	112		
High		4*	4B-	9*	39*	14*	4*	
Offering price of new stock		$100	100	100	100	100	100	
Ratio of new offering to stock outstanding		.125	.125	.125	.125	.10	.10	

* Surplus was charged with large special deductions in this year.

Can the stockholder who purchased these stocks at the beginning of the period be blamed for taking a long-range view of his investment and regarding the proceeds of the sale of his rights as wholly income? His equity in surplus has not been reduced, for the very good reason that retained earnings have more than offset the dilution caused by the sale of new shares at less than book value. Nor have his earnings and dividends suffered from dilution. This shift from a still picture of the condition at the instant the stock goes ex-rights to a motion picture of the progress of book value over a period of time provides a very different idea of the problem as to whether the value of rights sold should be regarded as a recovery of a part of the principal originally invested or as income to a greater or lesser degree.[31]

If the market value were always the same as book value, these illustrative figures would provide a solution for the problem as simple as the determination of bank deposit income from one's bankbook. A sale of rights could be treated as a sale of principal to the amount the book value of the seller's holdings was reduced below the figure at the time of purchase. However, market value fluctuates without any close relation to book value, and so no such simple solution of the problem of distinguishing between principal and income that will be fundamentally sound is to be had. Some of these differences between book value and market value arise naturally and logically because in many cases ledger accounts do not follow the current value of reproducing assets and because earnings do not equal the "normal" return that would make the value of the securities of a going business just equal to the sum of its tangible

[31] Lest the critical reader feel that this reference to book value and the stockholder's individual position is too radical, it may be pointed out that the courts have had recourse to such reasoning to determine whether an extra cash dividend was wholly income. By showing that the dividend came from surplus accumulated prior to the date on which the trust was created, the courts of some states have found that such portion was a part of the principal and should be preserved as principal and not disbursed to the beneficiaries as income. W. J. Graham and W. G. Katz, *Accounting in Law Practice* (Chicago : Callaghan and Co., 1932), pp. 342-343. For a study of the rules applied in various states, see H. D. Kerrigan, "Stock Dividends in Trust Distributions," *The Accounting Review,* June, 1937, pp. 93-104.

properties. Moreover, the security market fluctuates in an erratic manner that defies any simple analysis.

Because of these difficulties a simple working solution is arbitrarily adopted in such matters as the division of income and principal in trusts and the determination of income for income taxation. The instantaneous picture of the situation at the moment the stock goes ex-rights is accepted. (If this view were adopted in the case of cash dividends, they also would become distributions of principal instead of income.) A sale of rights is regarded as a sale of a fraction of one's shares (principal), the fraction being equal to the ratio of the market value of the rights to the sum of the market value of the stock and the market value of the rights on the day the stock goes ex-rights.[32] Thus, if the market value of a right is $10 and that of a share of stock is $90 on the day the rights are issued, one tenth of the principal is treated as being sold by disposing of the rights."

This procedure has the advantage of simplicity and uniformity from the standpoint of accounting and the administration of income taxation, but it should not be thought of as ideal or wholly logical if one cares to look behind the façade of working rules that are necessary to avoid an undue waste of time in solving vexatious problems that would in most cases involve personal judgments and debatable conclusions. In the case of some persons the sale of rights will in reality involve no loss of "capital" or original investment. The basis for this statement is found in the illustrations of American Telephone & Telegraph and Commonwealth Edison rights. If such stockholders are able to sell their rights during a period of speculative fever, they may realize far more than the amount of retained earnings required to maintain the assets or earning power per share. On the other hand, the disappointed speculative buyer who has paid a high price for his shares in the hope of recovering a substantial part of that sum by selling rights at similarly high prices may suffer a very heavy and real loss when the rights either fail to materialize or sell at a lower figure than anticipated because of a market decline. According to the conventional formula, however, no loss has been "realized" if rights do not appear, and, if the rights are sold at a low figure, that very fact reduces the amount by which original cost is written down.[34]

" This view was expressed by the Court in Miles v. Safe Deposit & Trust Company of Baltimore, 259 U.S. 247 , (1922).

" For income tax treatment see Income Tax Regulations, 101 Article 22(a)-8.

"If a stockholder had received frequent rights for a number of years, as in the case of the American Telephone & Telegraph Company and Commonwealth Edison Company, and these rights had allowed him to subscribe for a considerable amount of stock at substantially less than market value, we can imagine him paying a high price in terms of asset value and earnings on the theory that he could write down his investment from the sale of future rights. Actuarially,

The foregoing discussion, which is primarily concerned with the stockholder's point of view rather than that of the corporation, has been interposed here partly to clarify the general problem of rights, sometimes discussed as though it were solely a problem of diluting the book value per share, and partly because the corporation management that hopes to finance successfully should understand the investor point of view, to which it must cater.

Pricing stock for sale by rights. The necessity for offering the privilege of subscription at a figure below market price in order to insure the exercise of the rights has already been pointed out. This general rule leaves unanswered the question as to what discount from the market is desirable. No single rule can be laid down, but the important considerations can be listed and those of greatest weight may be made the basis for policy in any given situation.

The advantages of setting the subscription price substantially below market—that is, relatively low—are as follows:

1. ***Reduction in risk of failure.*** Since the success of the financing may be crucial, an ample margin may be useful to protect the corporation against a possible decline in the market price. Any factors that make for market stability in the price of a particular stock will make it safe to rely upon a narrower margin. Similarly, factors that make probable the exercise of rights by the great majority of the stockholders will reduce the volume of rights offered for sale and so lessen the pressure on market price.

2. ***Possibility of enhancing stock value.*** Since some stockholders will regard any rights as the equivalent of dividends, the creation of valuable rights may have something of the effect upon market price of a special or extra dividend. (The converse of this point is stated below.) It is easiest to offer attractive rights when the stock market is at high levels, and at such times the cash which is received from what appears to be a low subscription price is more likely to be adequate to produce sufficient assets to maintain the per-share earning power. Market popularity is useful to the corporation not only in enabling it to sell stock but also in advertising the company favorably, which helps in selling prior issues, in obtaining mercantile or bank credit, and sometimes aids in obtaining business by yielding trade prestige.

3. ***Reduction in per-share value.*** The corporation may deliberately place the subscription price so low that it will necessarily dilute the value per share. In this way the corporation tends to mask one of the evidences of its prosperity—rising market price—and to make its condition less apparent to the superficial observer. Since neither market price nor the size of surplus are accurate

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the high price is the discounted, or present, value of these near-term rights plus the investment value of the stock apart from these rights.

indexes of whether the corporation is earning a high or low return, the device represents a catering to public psychology where popular odium might be harmful.[35] A large surplus may be the result of an ultraconservative dividend policy over a long period or of "paid-in" surplus, rather than an excessive rate of return. Since the public is none too skillful in financial analysis, public utilities are likely to find it wise not merely to follow the path of virtue but to avoid such appearances of opulence as are likely to be seized upon by the ignorant or unscrupulous as proof of exploitation of the public,

The possible disadvantages of too low a subscription price should also be considered:

1. *Valuable rights may engender excessive speculation.* While the elevation of market price which may follow from rights being capitalized by the market as so much in dividends can be advantageous to the corporation in facilitating financing, it may foster an excessive speculative rise. It is difficult to hold directors responsible for undesirable speculation in their company's securities, since very often the phenomenon is one common to the stock market as a whole. However, directors who take the long-run point of view will prefer that the stock of their company keep reasonably in line with the market lest it subsequently fall from the heights and possibly cause stockholder ill will. Unfortunately an inflated stock market places management in a dilemma: if it sells stock at a figure close to the high market price, the buying stockholder may feel badly treated at a later date, when the stock returns to a more normal level; but, if stock is offered at a relatively low price at a figure which the directors regard as fair without regard to the market, they create rights that may be regarded as an incitement to a high market—at least if a repetition of rights is expected. The granting of rights in such a market may set up a vicious circle in which rights of high value become the popular justification for a high market price that in turn makes a high price for rights inevitable if the subscription price is set at anything like a normal-value figure.

2. *High price aids market record.* When the corporation is more concerned with making a satisfactory record for its stock, a

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[35] During the inflation of the early 1920's in Germany, offers of stock by privileged subscription to old shareholders at par although the market was much higher appeared very advantageous. "This policy which consisted in not taking advantage of possible premiums on new shares, was primarily inspired by the desire to prevent the dividends paid on capital stock from appearing too high .. . it should not be overlooked that the issue of new shares at a low price or perhaps gratuitously was the only means of covertly distributing nominal profits of very substantial amounts." W. Collings, "European Accounting Theory" (Northwestern University School of Commerce Lecture Notes, 1932), p. 6.

high subscription price brings in a larger sum of cash for investment and thus helps to make a more favorable showing in growth of assets and earnings *per share* over a period of years. Except for the regulated industries, referred to above, in which an adverse reaction by the public to the appearance of prosperity must be considered, a corporation generally finds it helpful to its financial standing to show a rising trend of property values and earnings on a per-share basis.

Sometimes it is argued that the price at which the stock is sold makes no difference, because the stockholder is given the opportunity to buy his prorata share of the new issue. What he "loses" on the value of his old holdings, he "gains" on his new holdings. Or, under the assumption that the market is a perfect instrument of valuation, it is pointed out that he can sell his rights and so collect the fair value of what they subtract from the value of his old stock. Unfortunately the market is not always a perfect appraiser, especially over the short run. This is particularly true for smaller companies, whose stock has an inactive market, and which may find the price depressed appreciably by a new issue.

Here is one of the most important arguments for underwriting the flotation. The amount paid as a commission may not merely assure the success of the financing but also enable the corporation to gain the advantage of a higher issuing price, which was just cited, and also to reduce the possible loss to stockholders who cannot exercise their privileges and must take whatever the market offers for rights. This argument for a high subscription price and underwriting is particularly important when there is the probability that a large number of stockholders will not subscribe. For that reason, underwriting seems most logical for rights to subscribe to convertible bonds and preferred stocks, which because of their difference in character from the common stock held are most likely to be absorbed by others than the stockholders.

3. *Loss to stockholders not disposing of rights is reduced.* A minor consideration is that a minimum spread between market price and subscription price will reduce any loss by that minority of stockholders who fail either to exercise their rights or to sell them. For small corporations, in which stockholders would have no opportunity to appraise rights on the basis of a market valuation and dispose of them if they did not wish to subscribe, this consideration might be important.

The foregoing points are some of the practical pros and cons to be considered by directors when planning financing through privileged subscription. The question of proper pricing will be present when the corporation's stock is unusually depressed or inflated. Such occasions are most general when the stock market as a whole

is suffering a panic or enjoying the hectic flush of a boom. In bad times, the market prevents an offering of stock at anything like a price the directors would regard as reasonably close to the "normal" or long-run worth of the shares. The sale of any substantial amount of stock at such a time may so dilute the per-share value as permanently to lower the investment worth of shares. To assure the stockholders that they can exercise their rights if they believe the stock is a bargain at the depressed figure may be small consolation. Many may be unable to do so. They are in the position of partners who see new partners being admitted on extraordinarily favorable terms and acquiring an interest for a fraction of what they have paid for the same shares. The exigencies of the times may force them to endure the bargain, but every effort should be made to avoid such "distress" financing. The same rule is true for issues convertible into common stock, but to a lesser degree, because the conversion can generally be made profitably only at stock prices considerably above the market price at the time of the financing.

Conclusions

The importance of the subject matter of this chapter may be realized from the fact that, after the original issue of stock by the corporation, the bulk of all common stock financing is by rights. Their use is also invoked for the less frequent purpose of offering convertible securities. The existing stockholders constitute a preferred market, for they are familiar with and presumably favorably impressed with the corporation. The directors are responsible to this group for maintaining and enhancing the value of the stock as far as possible. Under the circumstances they will find it desirable to give their closest attention to such matters as the timing, the size, and the terms of any new issues to this continuing market. (1) In general, they will use common stock or retained earnings in ordinary and in prosperous times to build up the common stock interest and so create a strong position that will give the company a reserve of credit for any periods of difficulty or emergencies. A possible exception will be found in those cases where in the opinion of the directors the earnings prospects are especially brilliant, and this expectation is not adequately reflected in the market price. To sell common stock in such cases would have the same diluting effect as a sale by an ordinary corporation in a depression, when the market is much below the ordinary investment worth. (2) As far as possible, common stock financing will be avoided in periods of market reaction, when the dilution effect previously described would be likely. If some participation in future profits must be given at such a time, the convertible bond or preferred stock is usually the least expensive device.

CHAPTER 17

DIRECT SALE OF SECURITIES TO EMPLOYEES AND CUSTOMERS

Introductory

Motives behind special methods. The sale of securities to the public and to stockholders, as discussed in previous chapters, has for its sole purpose the raising of funds for business use. Sale to employees and customers, on the other hand, may and often does involve motives other than that of financing. In the case of sale to employees, the management is generally as much, if not more, interested in improving labor relations or building executive morale as it is in raising funds. "Employee stock ownership" is, therefore, often a matter of labor policy as well as of finance.[1] While the financial importance of the subject is not great, it does have a considerable popular interest, and those who have charge of the financing should be familiar with the pitfalls as well as the advantages. Similarly, the sale of securities to customers involves questions of customer relations as well as the problem of raising capital, but the financial motive has been at least as important as the nonfinancial in this method of finance.

Employee Stock Ownership

Development. The movement to sell securities to employees began around the turn of the century, and by the World War period a number of important companies had established employee stock-purchase plans to encourage profit sharing, thrift, and industrial partnership. Among the early users were the Illinois Central Rail-

[1]Some references on employee stock ownership which treat the subject from the standpoint of industrial labor policy as well as from the point of view of finance are Gorton James and others, *Profit Sharing and Stock Ownership for Employees* (New York : Harper & Bros., 1926) ; R. F. Foerster and E. H. Dietel, *Employee Stock Ownership in the United States* (Princeton University Press, 1927) ; National Industrial Conference Board, Inc., *Employee Stock Purchase Plans in the United States* (New York: The Board, 1928) and *Employee Stock Purchase Plans and the Stock Market Crisis of 1929* (New York: The Board, 1930) ; H. Baker, *Statistical Analysis of Twenty Employee Stock Purchase Plans* (Princeton University Press, 1932) ; *Hearings,* 75th Cong., 3rd Sess., pursuant to Senate Res. 215, providing for an investigation of existing profit-sharing systems between employers and employees in the United States, November 21 to December 14, 1938.

road Co., National Biscuit Co., Firestone Tire and Rubber Co., Procter and Gamble Co., E. I. du Pont de Nemours & Co., Dennison Manufacturing Co., United States Steel Corporation, Commonwealth Edison Co., and Brooklyn Edison Co. The movement had its greatest impetus during the period 1921-1929, when it was a very common practice to offer securities to employees. [2] The stock market crash of 1929-1930 brought a halt in the general movement and subjected the plans already in existence to a severe test, and the present decade has been characterized mainly by efforts to preserve plans already in existence rather than to inaugurate new ones. [3]

Present extent. The present status is difficult to measure, since existing studies were largely undertaken before the depression of the 1930's. The National Industrial Conference Board estimated that in 1927 approximately one third of the 2,736,000 employees of 315 representative American corporations owned or had subscribed for over one billion dollars worth of stock of the companies by which they were employed. [4] The most common number of employees (mode) per corporation ran between 250 and 2,000, indicating the inclusion of many companies of moderate size. The average holding was approximately $1,300. Additional securities may very well have been purchased by employees of the larger corporations in the open market.

Electric light and power companies and the American Telephone and Telegraph system have been the most aggressive groups in a steady policy of sale of stock to employees. A number of manufacturing companies have been prominent users of the idea in recent years, including such well-known names as the American Tobacco Company, General Motors Corporation, Procter and Gamble Company, Sears, Roebuck and Company, and United States Steel Corporation. Aside from the Illinois Central, the New York Central, the Lehigh Valley, the Pennsylvania, and a few others, employee stock-purchase plans have not been generally fostered among the railroads.

Possible advantages to the corporation. The motives lying behind the offer of securities, ordinarily stock, to employees are many and varied. Since some doubts may exist as to the actual

[2] See Foerster and Dietel, *op. cit.,* pp. 7, 8, for a list of corporations inaugurating plans during the period 1920-1927.

The dates of inauguration of 389 employee stock-purchase plans up to 1928 were as follows: 1900 or earlier, 3; 1901-1915, 57; 1916-1925, 273; 1926-1927, 17; no information, 39. National Industrial Conference Board, Inc., *Employee Stock Purchase Plans in the United States,* p. 2.

[3] *Ibid.,* pp. 2, 35. These figures do not include securities bought by employees on the market, outside of any organized company purchase plan. And, for the most part, ownership by directors and ranking executives is excluded. (See Appendix II for the list of companies studied.) Stock-purchase plans were reported by 389 companies, but the Board presents data on the number of employees and the amount of stock purchased in only 315 companies.

advantages of employee stock ownership, the following points may be regarded as arguments advanced in its favor from the corporation's point of view:

A. Nonfinancial:

1. Increased employee welfare and thrift.
2. Improvement of employer-employee relations.
3. Discouragement to hostile unionization.
4. Education of employees in business problems.

B. Financial:

1. Reduction in labor turnover.
2. Fewer objections to necessary wage reductions.
3. Increase in labor efficiency.
4. Favorable publicity and advertising.
5. Wider diffusion of stock ownership, leading to greater permanence of management and narrower stock price fluctuations.
6. Economical method of raising new funds.

While the motives behind the particular stock-purchase plan cannot always be determined accurately, the majority probably did not grow out of any need for financing. This was most often true of the larger industrial corporations, which sometimes bought the stock to be sold to employees in the open market. Management felt that the *esprit de corps* of the personnel would be improved by encouraging participation in ownership and profits. Any lowering of that class barrier which puts labor and the owners of property in opposition was felt to be healthy.

On the other hand, employees do represent a possible source of funds, especially when they are well paid. An industry growing rapidly and needing large sums of money, as the utilities did during the 1920's, found employees one more source of funds. They had the advantage of familiarity with the business and could be sold stock at very little expense and without investment bankers' commissions.

Possible disadvantages to the corporation. The success of employee stock-ownership plans would appear to depend primarily on the price performance and the dividend record of the stock purchased by the employees. The danger to the corporation is that the goodwill created by the stock purchases may be turned into ill will if the employee loses on his investment. Since most employee stock is sold on the installment plan, a decline in market price below the selling price is particularly disagreeable to the employee. Unless the contract is canceled, he may even, on occasion, find that his unpaid balance to the company is greater than the market price

of the stock. The effect of the crash of 1929 and the ensuing decline in stock prices on employee stock-purchase plans has not been adequately studied, so that it is impossible to judge the importance of this disadvantage.[5]

That the majority of companies have not yet offered stock to their employees may be due to the fear that more ill will than good will may be created. Employees may not understand the risks they are undertaking in possible fluctuations in the price and dividend income of the stock. Management may doubt the wisdom of employees placing their savings in the stock of the company for which they work, or in stocks generally. Some corporations do not relish the idea of having employees as stockholders, because they do not care to disclose the policies and condition of the company to them. In general, most corporations prefer to construct their labor policy around matters of wages, hours, and working conditions and to keep their financial policy distinct from matters of industrial relations, letting the employee take the initiative if he wishes to invest in the company.

Advantages and disadvantages to the employees. Looked at from the point of view of the employee, the chief possible advantages would appear to be three. In the first place, the employee may receive a higher return than he would if he invested independently. This point implies either that he is employed by a corporation that makes more than average profits or that the stock he purchases has some special advantage over securities available in the general market. Sometimes a special class of stock is sold to employees that is given a more advantageous participation in profits than would be offered if the stock were being sold in the public market. At other times the stock is sold at a price below the going market price.

The second advantage to the employee is that the ease with which the investment is made encourages him to a thrift program which he might not initiate otherwise. The company undertakes the selling of the idea and then makes the saving easier by an installment plan of payment.

A third possible advantage exists when the company undertakes to make the stock purchase more attractive than the ordinary stock investment by agreeing to repurchase it on favorable terms in the event of need or the severance of employment.

More important than the special advantages of employee stock-purchase plans will be the investment character of the particular

[5] One study, made in 1930, concludes that the plans emerged from the critical period in good shape, and that employee goodwill was not damaged by the crash. National Industrial Conference Board, Inc., *Employee Stock Purchase Plans and the Stock Market Crisis of 1929.*

stock purchased, about which no generalization is possible. The merits of a given stock will depend upon the business of the issuing corporation, its capital structure, the kind of stock bought, the timing and price of the shares, and the terms upon which the purchase contract can be canceled or the stock can be redeemed by the company.

Undoubtedly the most important disadvantages are (1) the general risk of stock investments for most employees and (2) the probable inadvisability for most employees of risking their savings in the business in which they work. Most investment advisors would agree that the employee of small means had best place his moderate savings in the most conservative form of commitment possible, partly because his small means make risk bearing inappropriate and partly because of his probable lack of financial skill. Placing his savings in the stock of the company for which he works also means an undesirable concentration of risk. The same ill winds that cause unemployment and a need for recovery of principal would be likely to lower the market value of his stock.

The experience with employee stock-purchase plans to date suggests that employee stock ownership has been no panacea for labor-capital disputes. This may be due to the fact that outside of companies such as the Dennison Manufacturing Company and Fuller Brush Company, in which the goal is either complete or partial ownership and management by employees, the individual stock holdings of employees are so small and so widely scattered as to preclude any representation in management. In only a few companies, such as the Philadelphia Rapid Transit Company, have employees as a group purchased enough shares to give them representation. Stock held by employees in management and executive positions can hardly be classed as employee owned. Employees of such corporations as the American Telephone and Telegraph Company, Swift and Company, and the United States Steel Corporation hold large percentages of the total stock but exercise only slight influence upon management.

Types and sources of securities sold to employees. Common stock seems to be the predominating type of security offered by the industrials, especially where the plan is open only to selected employees occupying positions of higher rank Among the utilities preferred stock has predominated, except for companies, such as American Telephone and Telegraph Company, which have only one class of stock outstanding. Among the utilities the use of preferred stock has gone along with its concomitant sale to customers. A few companies have offered a choice of preferred or common. Some companies pay a special bonus or set aside a share of the profits to be paid out as a special dividend on those shares which are held by

employees.[6] Others have created a special class of stock for employees only.? In rare cases bonds and other debt obligations have been offered.

Usually the common stock sold to employees has been purchased for that purpose in the open market. Occasionally treasury stock has been available in the treasury of the corporation for this purpose. If ordinary unissued stock were to be sold to employees, the regular stockholders, who have the right to subscribe to new issues, would have to take formal action waiving their rights.

Prices at which securities are sold. Stock may be offered to employees at either the market price or a lower figure. If it is sold at less than the market price, a dilution in the value of the other stockholders' shares takes place, but ordinarily the amount of stock sold to employees is so small as to make the point of little save theoretical interest. If the stock is treasury stock or is acquired by the company in the open market, it may be sold to employees at any price determined by the directors. Whether the company offers the stock at market price or less will depend upon whether it feels it is desirable to give a bonus to induce ownership. Many companies simply assist their employees to buy stock at the market price by arranging the purchase or by carrying the installment account. For the most part, employees of electric light and power companies have paid the same price as customers and the general public. Concessions below the market price are definitely planned by other companies. The American Telephone and Telegraph Company always sells stock to its employees below the market.

Mechanics of purchase. Stock acquired by an employee under a stock-purchase plan may be paid for outright, but generally it is paid for on the installment plan, the employee making payments each payday or authorizing the company to deduct the installment from his pay check. Usually the unpaid balance is credited with any dividend which may be declared, and interest is charged upon the unpaid balance. The installment period ranges anywhere from

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Under General Motors Corporation's 1924 plan employees were offered a 7 per cent debenture stock, and, as an incentive to retain the stock and to continue as an employee, a payment of $2 per share per year was payable conditionally in addition to the regular $7 for five years after purchase. Procter and Gamble Company (1929 plan) paid an additional profit-sharing dividend after entry into the plan of 12t per cent of salary or wages not in excess of $2,000 per year.

The Dennison Manufacturing Company has the unusual arrangement of all of the common stock being owned by employees. It is divided into two classes • The first is "Management stock," which goes to the principal employees and ordinarily enjoys the exclusive voting privilege; the second is "Employees stock," which is held by other employees. Both classes are subject to certain preferred stocks, are issued as extra remuneration, and must be transferred back to the company either for cash or a preferred stock in the event that the employee leaves the company. Julius Kayser & Company has special employees' 8 per cent nonvoting preferred stock.

one year to five years. Ordinarily the stock will be purchased by the company rather than by the employee. The stock serves as collateral to secure any unpaid installments owed by the purchasing employee. In order to avoid any risk of the stock declining below the amount still unpaid, the purchase of stock may be deferred until the payments have accumulated for a time, or it might even be made only when enough had been accumulated to buy one or more shares. The latter arrangement would have the advantage from the corporation's point of view of eliminating any risk of loss through inadequate collateral because of declining market value and inability to recover from the employee.

Whether the basis is subscription for stock already purchased or the accumulation of savings, with the stock to be bought at a later date, the payment for shares over a relatively long period is somewhat advantageous to the company in that new offerings at frequent intervals are unnecessary, and a uniform plan of records may be devised that will minimize handling costs. On the other hand, the longer the period of payment, under the subscription and installment system at least, the greater is the chance of fluctuation in market price and the possibility of loss for either the corporation or the employee.

Classification of employees. The conditions under which employees are eligible to buy stock vary widely from case to case. In some cases, subscription is open to all, with no restrictions. In others, subscription is limited (1) according to length of continuous service; (2) according to wages or salary received; (3) according to class of service, a distinction being made between "managerial" employees and other employees; or (4) according to number of shares already owned—that is, with a maximum number established. The eligibility requirements for the 389 corporations studied by the National Industrial Conference Board indicate that 224 plans were open to all employees, 91 depended on length of service, 9 others had a wage limit, and no information was available with respect to the others.[8] This group of plans excluded typical incentive compensation plans for management but included "selected employees" plans not strictly managerial in type.

Since these plans are to stimulate group loyalty, casual labor is likely to be excluded. Some arbitrary test of eligibility, such as a record of one year's employment with the corporation, may be set up. In order to prevent the individual employee from undertaking too much or from profiting unduly when the plan has a bonus character, his subscription may be limited to some percentage of his annual wage or salary. For the latter reason an upper, or maxi-

[8] National Industrial Conference Board, Inc., *Employee Stock Purchase Plans in the United States,* p. 56.

mum, limit may be placed upon the amount of stock which may be acquired under the plan. Those employees who occupy executive or managerial positions are much more likely to influence efficiency and earning power than those of the rank and file. For that reason some plans have given larger participation to those occupying the higher ranks or have even been confined to executive personnel.° Personnel in the higher ranks are usually better able to bear the risks of a common stock investment and to understand and appraise the character of their commitment.

Restrictions on the amount of stock sold to individual employees. There are several reasons for limiting the amount of stock sold to individual employees: (1) The total amount of stock available to offer may be limited; (2) unrestricted sale may lead to rapid resale by employees if the stock is made available below the market price; (3) when stock is sold at a concession or with some other incentive which represents a cost to the company, such as a bonus, the company will wish to limit its liability to individual employees; (4) the load on the individual employee, when stock is purchased on the installment plan, should be restricted; (5) undue concentration of investment risk by employee investors should be prevented.

In some plans which provide for the purchase of stock for cash there is no limit to the amount of the individual subscription. Usually, however, individual subscriptions are limited either arbitrarily or on the basis of salary or wage scales or length of service. Salary or wage-scale limitations may either be based on a percentage of salary or wage or be prorated so that one or more shares may be purchased for each $100 of salary. In order to get a wider diffusion of ownership and to prevent undue concentration in the hands of old and high-salaried employees, some companies place limitations on the total amount which one employee may obtain through successive subscriptions.

Cancellation, redemption, and resale. The conditions under which employees may cancel their subscriptions, redeem their stock, or sell their stock are determined by the provisions of the plan. In the majority of cases, the securities are delivered when the total subscription is paid for; in a few, however, each share is delivered when paid for, or delivery is made only after a specified period has elapsed, even though full payment may have already been made.

Thus, participation in the General Motors Corporation's plan of 1923 was through investments in what was known as the Managers' Securities Company. The corporation contracted to pay the latter 5 per cent of its excess net earnings over and above 7 per cent on the net capital employed annually for each year from 1923 to 1930. Men occupying important managerial positions in the corporation invested $5,000,000 in cash in the common stock of the Securities Company in 1923.

There will always be a number of uncompleted subscriptions and a number of shares paid for but undelivered, either because the employee is unwilling or unable to complete his payments or because he has left the service of the company. Ordinarily, when payments are not made according to schedule, the contracts are automatically canceled.

When an employee requests that the contract be canceled, he seldom is permitted to sell or transfer his subscription himself, and in most cases cancellation involves the whole subscription, with the return of the entire amount paid in, together with interest. Unwillingness to continue the contract is affected not only by unemployment and reduced wages but also by passed dividends and lower stock prices. As we have pointed out above, the full effect of a major depression and decline in the securities market, such as began in 1929, upon subscriptions and cancellations has not yet been measured. Since the employees who subscribe in the first place are often a rather select group, the cancellation of contracts and resale of securities has probably been less serious than the downward course of the stock market would lead one to expect.

Nearly every stock-purchase agreement has something to say about the resale of securities sold to employees." After the company has received full payment and the delivery of the certificate has been made to the employee, the company will not care whether the employee holds or sells, if capital raising has been the main motive behind the plan. But, if thrift, better labor relations, reduced labor turnover, or other similar motives have predominated, special restrictions are placed on resale, and special inducements are made to discourage it. Among the restrictions are (1) permission to resell must be obtained from the company; (2) the company has the option to buy back the stock; or (3) the stock can be resold only to the company. For the most part, companies which sell listed securities put no restrictions on their resale and make no provisions for their repurchase. Unlisted and special employee stock issues are usually resold to the company.

The outlook for employee ownership. A number of companies have discontinued employee stock-subscription plans. In some cases, price declines have disappointed and discouraged employee purchases. In other cases, financial reorganizations and mergers caused discontinuance. Sometimes the employees were either uninterested in or unfamiliar with stock investments. Once hailed as the way out of the capital-labor struggle, employee stock ownership has fallen far short of this ambitious goal. It is difficult to generalize as to its future importance, since the success or failure of

[10] National Industrial Conference Board, Inc., *Employee Stock Purchase Plans in the United States,* p. 113.

individual plans has depended on their particular terms and the period of operation. In 1928, most commentators and students of the question were enthusiastic and optimistic about employee stock ownership. From the financial point of view, it appears today that funds can be raised from other sources with equally satisfactory results and that possibly other methods may be found for employee participation in earnings, particularly for nonmanagerial and less well-paid employees, that will involve less heartache and ill will if the stock suffers as an investment.

Nonfinancial motives will continue to encourage the idea in many' quarters, and its success will depend in part on the care with which the arrangement is worked out and administered, and in part upon the degree to which the securities of the companies using the plans are favorably affected by the business cycle and the success of the particular business unit.

Profit-sharing plans without investment. Employee stock-ownership plans, such as have been outlined above, must not be confused with bonus and incentive compensation plans which require no investment." The general objectives are much the same, however. [12] Plans in this latter category are probably aimed more often at managerial employees than the rank and file, as in the case of the General Foods Corporation and the Bethlehem Steel Corporation. The participation may, however, include all kinds of employees, as in the case of the. Endicott-Johnson Corporation. [13]

A special argument for participation in the case of managerial employees is that it serves to hold the more able and ambitious men, who might otherwise be tempted to strike out into their own business to achieve higher incomes. The amount of profits set aside for employee participation may represent only 5 to 10 per cent of the net income after a certain minimum return has been earned upon the stockholders' investment. This minimum return which must first be earned might be compared with the fixed wage or salary which the employee receives, although it should be noted

" The profit-participation and stock-purchase ideas may be combined by requiring that amounts received from profit participation be used to purchase stock of the corporation.

" Studies of special compensation plans for executives include C. C. Balderston, *Managerial Profit Sharing* (New York : J. Wiley & Sons, Inc., 1928) ; J. C. Baker, *Executive Salaries and Bonus Plans* (New York : McGraw-Hill Book Co., 1938) ; J. C. Baker and W. L. Crum, "Compensation of Corporation Executives—the 1928-1932 Record," *Harvard Business Review,* Spring, 1935, pp. 321-333 ; J. C. Baker, "Incentive Compensation Plans for Executives," *Harvard Business Review,* Autumn, 1936, pp. 44-61, and "Executive Compensation Policies of Small Industrial Companies, 1928-1936," *Harvard Business Review,* Summer, 1938, pp. 466-480.

" The arrangement in this company is that, after preferred dividends and 10 per cent on the common stock have been paid, one half of the balance is to be distributed among the employees. Nothing has been available for payment under this profit-sharing plan since 1928.

that the employee collects his wages during employment regardless of the fortunes of the business, whereas there is no certainty that the stockholders will receive any return. Unless a minimum return upon stockholders' investment is provided for as a claim prior to any managerial participation in earnings, a management that is so unskillful as to be unable to make even an ordinary return upon the asset investment might collect bonuses that are supposed to be the reward of special merit. A badly situated corporation might, however, on occasion, require supermanagement in order to make even a mediocre showing.

In, general, profit participation should not be so lavish as to rob the company's stock of so much that it will impair its availability as a financing medium. If profits are subject to marked fluctuation, provision should be made to restore the financial damage of bad years before distributions are made in subsequent good years. This can be done by basing profit-sharing on dividend distributions rather than earnings. Furthermore, if the dollars paid out as a bonus are not earned by extra employee effort, they subtract a considerably larger sum from the value of the securities which might otherwise receive the sum as profits. This is because a dollar of earnings is capitalized to make a number of dollars of stock value.[14] A million-dollar bonus in a particular year would, if capitalized at 10 per cent, represent a value of 10 million dollars, which might add much to stock values.

Closely allied to managerial participation in profits is the granting of options to executives to purchase stock of the corporation for a period of time at certain stipulated prices. Such options are sometimes granted for significant amounts of common stock to one or a few executives to induce them to assume responsibility for a corporation experiencing difficulties.[15] The price at which the option may be exercised will be set at a considerably higher figure than the then current market price. In this way the option becomes a reward valuable in proportion to the extent of corporate financial

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[14] This capital value idea was ably used in the plan of the Rich Manufacturing Corporation (Battle Creek, Michigan), which issued a Certificate for Profit Participation, in which it is stated that the employee shall receive not a certain number of dollars but a sum "which will be equivalent to an *income* on an investment of Fifteen Hundred ($1500.00) Dollars, yielding a minimum of six (6) per cent per annum and a maximum of ten (10) per cent per annum."

[15] Examples of such options may be found in that granted to Sewell Avery upon his assumption of the chairmanship of Montgomery Ward and Company in 1932 and to the late James 0. McKinsey when he became chairman of the board of Marshall Field and Company in 1934. Walter P. Chrysler is reported to have been paid $500,000 per year by General Motors and $1,000,000 by Willys-Overland to help straighten out a business desperately in debt to the banks. When he went to the feeble Maxwell Motors, it was not felt that the business could stand any such salary, and so he received $100,000 and options to buy a large block of stock in what was to become Chrysler Corporation.

rehabilitation. Probably the chief criticism of such options has been that they are given most often during a period of trouble brought on by business depression, and the normal course of business recovery produces a natural improvement, so that the business executive reaps a prize as the result of external conditions rather than of his managerial ability.

Customer Ownership

The direct sale of securities to customers, like the sale to employees, has had motives other than the raising of funds. On the one hand, corporations employing this practice have sought to improve customer relations by making customers also part owners and to develop a friendly public feeling. On the other hand, as a means of raising cash, sale to customers has been undertaken in the belief that it constitutes an easy and economical method. While it is difficult to determine whether financial or nonfinancial motives have been predominant, the sale to customers has undoubtedly had a greater financial importance than the sale to employees.

Customer stock ownership in public utilities. Organized sale on a large scale to customers as such is of fairly recent origin. It may be said to have started after the World War period, during which large numbers of individuals had been educated in the purchase of securities by the financial drives of the Federal Government, and after which there was a large accumulation of individual savings seeking investment. The movement began, and has continued to have its greatest importance, in the public utility field. It is likely that the difficulty which electric light and power companies experienced in raising funds through the sale of stock for expansion immediately after the War period encouraged them to turn to their own customers on a large scale.

According to the National Electric Light and Power Association, customer ownership in the electric light and power group gained increasing impetus between 1920 and 1927, the peak year, and continued to be very important until 1930, after which all forms of new financing fell off sharply. From 1920 through 1931, 2,500,000 sales were made to customer investors of 25,500,000 shares of stock of a par value of $2,104,000,000.[10] Customer-ownership sales fell off in 1928 and 1929, owing to the public preference for common stock over preferred stock, which had been the type of stock offered for customer purchase by utility companies.

The stock market decline of 1929-1932 brought about a further reduction in customers' subscriptions. During the depression, only a few companies attempted to get new funds from any source.

[10] As reported in Federal Trade Commission, *Utility Corporations,* No. 71A, p. 306.

Since 1932 excess generating capacity and uncertainty over the Government's hostility toward the electric light and power industry and the decline in stock financing generally have combined to reduce security offerings to customers to a negligible amount.

Customer ownership in the railway and industrial fields. Since the early days of stock selling in the construction territory, railroad companies have not made use of customer-subscription drives as a source of capital, for several reasons. (Strictly speaking, such stock-selling campaigns were to prospective and not to actual customers, and furthermore the whole community, and not merely prospective shippers, were included in the list of possible subscribers.) In the first place, their customers are too many and scattered for easy contact. After the initial construction, the railroad cannot appeal to local feeling so well as a local utility company, because of its far-flung system. Railroad corporations were the first to employ large-scale financing through investment banks and have been able to acquire all necessary capital by public financing as long as their credit has been satisfactory. Finally, railroad employees do not have the continuous and close contact with customers that is enjoyed by utility employees, through whom most of the utility securities have been sold to customers.

Industrial corporations other than new and small local companies have relied upon customer stock purchase only in exceptional cases. Jobber groups have used the plan to finance the manufacture of commodities sold by the group. The original United Drug Company was founded on the idea of ownership by druggists who would feature "Rexall" products, which were manufactured by the company.[17] The American Druggists Syndicate, Inc., enjoyed considerable success in selling its products and its stock to customer-agents.[18] The Diamond Match Company and the United Shoe Machinery Corporation are other examples of industrial companies which have made it a practice to sell stock to customers. Generally speaking, however, industrial corporations have not resorted to sales to customers as a device for raising capital. Unlike the utilities, (1) they have had no need for a continuing stream of fresh funds from the outside to finance large asset expansion; (2) the sale of stock might conflict with the success of their merchandising because of investment dissatisfaction, which might arise as a result of the

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" The advantages claimed for the United Drug Company plan are summarized in E. E. Lincoln, *Applied Business Finance* (New York : McGraw-Hill Book Co., 1929), pp. 261-262.

is The American Druggists Syndicate, Inc., was formed in 1905 to deal in drugs and allied products in the interest of independent druggists. In 1926 control was acquired by Schulte Retail Stores Corporation, which guaranteed a dividend of 6 per cent on the capital stock, The company was purchased by Vadsco Corporation in 1929.

greater risks in the industrial field; and, (3) while industrial concerns can utilize customer goodwill, they do not require the widespread individual approval which the utility seeks in order to offset political harassment.

Advantages and disadvantages to the issuer of sale of stock to customers. The reasons for the use of customer ownership, some of which are peculiar to the regulated utilities, may be outlined as follows:

A. Nonfinancial advantages:

1. Creation of a closer and more friendly relationship between company and customers—"goodwill" value.
2. Reduction of risk of government ownership drives in cities where stock is widely distributed, as compared with cases where the stock is closely held by a few persons or by a holding company. In such a drive the utility might be forced to accept as compensation for its property a sum less than its actual cash investment because of the threat of government competition.
3. Creation of a group that would oppose confiscatory regulation.
4. Increased employee goodwill, since employees usually act as salesmen as a part-time activity, thereby increasing their knowledge of company's activities and earning extra compensation. Many employees also become stockholders as a result of these sales campaigns.

B. Financial advantages: [19]

1. Widening of the market for securities. This improved market makes the stock of the company more attractive and makes subsequent financing easier. By diffusing stock ownership more widely, it strengthens the control position of the current management.
2. Development of a more conservative capitalization, since stocks are the type of security usually sold to customers. [20] Customer ownership supplies a method of junior financing and so makes it easier for management to maintain a properly balanced capitalization. Bond financing is

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"See R. E. Heilman, "Customer Ownership of Public Utilities," *Journal of Land & Public Utility Economics,* January, 1925, pp. 7-17.

" The study by H. P. Bruner, "Influences of Customer Ownership on the Financial Structure of Public Utilities," *Journal of Land & Public Utility Economics,* October, 1925, pp. 459-468, reveals that in the 90 central station companies earning 43 per cent of the gross earnings of the electric light and power industry as a whole, customer ownership resulted in a financial structure approaching the standard—that is, a structure composed of bonds and stock in such proportions that the bond interest was earned twice over.

easier, and so whatever facilitates stock financing tends to create more conservative capital structures.

3. Lowering of cost of financing. The sale of stock through employees, as a part-time activity, can often be handled at a low cost that compares favorably with the charges of the investment banker In the case of utility sales, costs have been low, especially when it is remembered that sales have been made in small units, which would mean high distribution costs for an investment banker.

4 Development of a conservative financial policy, if it may be assumed that management feels the responsibility it undertakes in selling securities to customers. The company will need to pursue a course in such matters as dividend policy that will make for high-grade investment standing.

5. Possible development of a market for the company's products in the stockholder group.

The chief possible disadvantage to the corporation resorting to customer ownership is the danger of incurring ill will rather than goodwill if the market price of the stock declines precipitately after sale, or if dividends have to be cut drastically or passed. Another possible disadvantage lies in the lack of the investment banker's presence. However, if his services are used in issuing bonds, his advice and counsel may be available for sales of stocks to customers. The banker who appreciates the value of an adequate stock investment in the capital structure for creating quality bond issues will be cooperative in planning customer ownership.

Methods of selling to customers. The usual procedure in selling an issue of public utility securities to customers is to organize and train the regular employees for the sales task and set them to work inside and outside of business hours. The use of regular employees has several advantages. Their morale and enthusiasm is increased, and they are personally more interested in the company and its securities than paid salesmen would be. The cost of using regular employees is also moderate. (Commissions of about two dollars per $100 share have been paid.) However, selling securities is a specialized task which many regular employees are not qualified to perform. The hazards are that the issue will not get the proper distribution and that incorrect representations may be made. The corporation also lacks the assurance of raising adequate funds which investment banker underwriting would provide.

Occasionally, special paid salesmen or even investment bankers are used in customer-ownership drives, but such instances are rare. Regular employees can do the best job of meeting the ordinary cus-

tomer, even though a certain number of paid salesmen may be helpful to assure a more continuous sale.

Types of securities sold to customers. Preferred stock, usually nonvoting, has predominated in utility sales to customers.[21] Unlike common stock, such an issue can be sold to the public without first offering rights to the existing shareholders or obtaining a waiver of their privileged subscription right. From the management's point of view a preferred issue is desirable in that it supplies junior capital at a fixed dividend rate without upsetting the balance of control and without adding to fixed charges. From the customer's point of view it provides a security less vulnerable than common stock to changes in earnings and market price. These issues, offered at par, have usually been sold by the utilities with a dividend rate of 6 per cent or 7 per cent. In a few cases common stock has been offered, where the company was pursuing a policy of using common stock only in the stock portion of its capitalization, where the proportion of preferred outstanding had reached the desired limit from the management's point of view, or where the company was supporting the market for its common stock by reselling rights which the holders wished to dispose of rather than exercise.[22]

Most of the stock sold to utility customers has been sold for cash, but the installment plan, with charges made on monthly service bills, has also been employed.

Outlook for customer ownership. Used to a considerable extent by utility companies prior to 1930, the sale of securities to customers fell off in the following years along with other stock financing. A revival of such financing depends upon the renewal of utility expansion and confidence in the industry. Such securities will also meet with the more rigid supervision of the Securities and Exchange Commission under both the Securities Act of 1933 and the Public Utility Holding Company Act of 1935. While the latter act does not prohibit customer ownership as such, registered utility holding companies and their subsidiaries are restricted to stock which votes and is not preferred, so that, unless the Commission allows exceptions, the type of stock formerly offered to customers

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[21] Only 38 out of 246 large electric light and power companies offered bonds or notes to customers between 1914 and 1928. *Proceedings,* National Electric Light Association, 1928, pp. 253-256. The total of bonds and notes sold between 1924 and 1931 was only $100,000,000, as compared to over $2,000,000,000 of stock.

[22] According to statistics of the Customer Ownership Committee of the N.E.L.A., common stock was used to some extent before 1925 but soon gave way to preferred almost entirely. Of the amount of stock reported sold in electric company customer-ownership drives, 11.5 per cent of the shares sold in 1924, 5.86 per cent in 1925, and 1.58 per cent in 1926 was common stock. Federal Trade Commission, *op. cit.,* p. 302.

will not be available.[23] In the last analysis, the use made of this method in the future will depend upon the need for funds and on the particular capital structure of the individual companies. The utility with adequate investment standing will tend to resort to common stock for its equity financing, selling it by privileged subscription, to existing stockholders. If, however, growth is resumed at a rapid rate, resulting in a pressing need for funds, the sale of preferred to customers might return. Such financing would be most likely if the offering of common stock were temporarily disadvantageous. When the common shares are salable and at a reasonable price, the management will do well to consider lending its efforts to the sale of common to its customers and the local public generally. The common has distinct advantages over the preferred in periods of adversity, since there is less temptation to continue unearned dividends that may weaken financial position, and there is no aftermath of unpaid accumulations after a depression to injure market standing.

See pp. 624-625.

CHAPTER 18

SHORT-TERM FINANCING

Nature of Current Financing

Significance of short-term financing. Up to this point we have been considering the sources of long-term or permanent funds for the business enterprise. Such financing may be an infrequent episode for many corporations; some few may be perennially concerned with the problem. As for short-term financing, it is likely, on account of its very nature, to be a recurring problem for those who use it. Some businesses, like the railroads and the utilities, have almost nothing but fixed assets and so are not regarded as proper users of short-term financing. Actually, they may employ short-term loans to finance the construction or acquisition of fixed assets in anticipation of a later sale of stocks or bonds, or to meet some emergency, such as extraordinary operating losses. But the business with considerable current assets, such as the manufacturing or merchandising concern, is the logical user of short-term credits. The ready convertibility of the current assets into cash gives the short-term creditors confidence that their claims will be met at maturity.

A sufficiency of current assets is necessary for effective operation. Insufficient inventory may mean a lack of variety in products, in styles, or in sizes needed to keep customers satisfied. Or it may mean inability to give prompt delivery on orders. Trade will be lost under such conditions. An insufficient investment that will not permit a reasonable amount to be tied up in accounts or notes receivable of customers means inability to grant credit terms, which may be essential to obtain and hold business. Sufficient cash balances must be available to meet recurring bills that have to be paid to maintain credit standing and solvency.

While the operating problem consists of determining and managing these current assets efficiently, the financial problem lies in so arranging matters that, as liabilities mature, they can be paid promptly. Failure to pay means insolvency and the end of the business life of the corporation. Often the inability to pay is temporary, and the corporation patient proves to have suffered only financial ill health, so that a funeral is unnecessary.

In this and the next two chapters, attention will be given, first, to the factors which determine the amount of current assets required and so the financial need and, second, to the ways in which short-term credit provides for the current asset needs. A business can, as many a balance sheet will bear witness, obtain all of its current assets with funds supplied by bondholders and stockholders. But to the extent that short-term credit can be utilized the long-term financing of the business may be reduced.

Terminology for current items. The total resources, or assets, of a corporation fall into two general categories—fixed assets and current assets. The latter consist of cash and assets which will be converted shortly into cash in the ordinary course of business, or which, like marketable securities, may be easily and quickly converted into cash at the option of management without disturbing the business. Various terms have been applied to these assets and to the relationship between them and the current liabilities—that is, liabilities maturing within one year. The current assets are also called *quick assets, liquid assets, circulating capital,* and *working and trading assets.* "Working capital," according to the time-honored definition, is the excess of current assets over current liabilities. This definition, arises perhaps by analogy with the accountant's definition of total capital as the proprietors' interest, or the excess of total assets over total liabilities, so that *working* capital consists of the excess of current assets over current liabilities. Working capital thus becomes that fraction of the current assets which has been supplied by the permanent investors and should not be used to describe the total current assets. For those who feel there may be some confusion in using the term *working capital* because of its possible identification with the sum of the current assets, the term *net working capital* might be employed, as some have used the term *net current assets,* to express the working capital concept.[1] In our discussion, the terms *current assets, current liabilities,* and *working capital* for the excess of the first over the second will be employed. When the current debt exceeds the current assets, a working capital deficit exists.

Current asset and current liability items. The conventional balance sheet which classifies the assets will show at least two groups: (1) the fixed assets, consisting of those held more or less permanently, including physical plant and equipment, intangible assets like goodwill (preferably stated in a separate group), and investments in subsidiaries and affiliated companies held for purposes of control; (2) the current assets, consisting of cash, those

[1] In their financial reports Standard Statistics Company and Poor's use the expression *net working capital* as indicated here, while Moody's uses the terms *working capital* and *net current assets.*

assets which will be converted into cash in the regular course of business within a relatively short period, ordinarily a year or less, and those acquired with a view to their availability for conversion into cash. Since the main purpose of segregating current assets is to show the ability of the company to meet its shortly maturing liabilities, conservative policy would require the understatement rather than the overstatement of current assets.

A third group of items found on the asset side of the balance sheet consists of deferred charges and prepaid expenses. In so far as such items represent cash outlays made for services to be received in the near future, and so relieve the cash itself of a drain which would otherwise occur shortly, there is justification for including them among current assets for purposes of financial management. But they are seldom convertible into cash, and are sometimes merged with other deferred items, as bond discount or certain major expenditures of an expense nature that are being spread arbitrarily over a period of years, so that the common practice is to place them in a category separate from' the current assets. This separation facilitates the analysis of creditors who'are studying the current assets as the source of payment for current debt and who prefer to lean in the direction of understatement.

The more important and more frequently found types of current assets are as follows: [2]

1. Cash on hand and in bank.
2. Accounts receivable from customers (less reserve)
3. Notes receivable from customers (less reserve).
4. Other current accounts and notes receivable.
5. Advances on contracts.
6. Inventories, as
   a. Merchandise inventory (of merchants), or
   b. Raw materials, work in process, finished goods (of manufacturers).
7. Marketable securities held as temporary investments.
8. Accrued income.

Like the assets, the liabilities proper of a corporation may be classified into two main groups—fixed, or long-term, and current.

Accounting and auditing textbooks discuss the meaning and proper classification of balance sheet items. C. B. Couchman, *The Balance-Sheet, Its Preparation, Content and Interpretation* (New York: Journal of Accountancy, Inc., 1924), contains an excellent discussion of the classification and meaning of the balance sheet items. A more recent discussion is found in M. B. Daniels, *Financial Statements* (Chicago : American Accounting Association, 1939), Chapter II.

Form A-2 for corporations, and the instructions accompanying it, which are issued by the Securities and Exchange Commission, set forth the classification for purposes of registering securities with the Commission

Long-term liabilities will consist chiefly of bonds, notes of over one-year maturity, and mortgages. Current liabilities will include obligations maturing in one year or less. The types which are most important and most frequently found are the following:

1. Accounts payable to trade creditors.
2. Notes or bills payable.
3. Accrued expenses, such as accrued taxes, salaries, and interest.
4. Liability reserves of the nature of accrued expenses, such as a reserve for Federal income taxes.
5. Dividends payable.

Contingent liabilities, such as might arise from the endorsement of another's promissory note or the guarantee of another corporation's bonds, are ordinarily itemized in a footnote rather than placed in the balance sheet proper. Deferred income sometimes appears in the balance sheet and represents liability for payments made in advance by customers for goods or services to be delivered in the future. This delivery must frequently be made within a short period, and so the item resembles a current liability. It does not require payment in cash, however, but it should be supported by enough current assets to assure performance. It also differs from current debt in that in the normal course of business it includes an element of profit that will be realized upon performance of the contract.

Circulation of the current assets. Such terms as "working" or "circulating" assets suggest that the main financial problem of management is to maintain a regular conversion of cash into other working assets and back again. A healthy circulation is as important to the corporation as to the human body. Originally cash comes into the business through investors' contributions. After that it must be maintained by the business processes. It is expended for a stock of goods either acquired from others or manufactured after expenditure for labor and raw materials. The inventory so acquired is then converted into an account or note receivable by the mechanism of sale. Upon collection of the amount receivable from the customer, the circuit has been completed, and the cash is ready to repeat the cycle. Other details might be inserted in this picture, but they are secondary. Operating expenses for selling and administration will have to be paid. They should be covered by the mark-up of the inventory when it passes to the customer. In the successful business this gross profit element will also include an amount which will provide a return for the investors in the form of interest and dividends.

If anything happens to obstruct the regular change in form from less current to more current, such as the freezing of inventories or

receivables, because the former become unsalable or the latter become uncollectible, the cash necessary to meet cash outlays is not available. If the business is to avoid financial insolvency, either the current assets must be kept moving, the management must provide a backlog of excess cash or marketable securities to tide over a period of sluggish flow, or it must have a reserve of borrowing power. The central financial problem of management is the provision of adequate cash for meeting obligations as they mature. On the successful handling of this problem depends the credit standing and financial solvency of the business. The business may have many types of assets, but cash is the only type that is universally acceptable to employees, vendors of goods and services, and creditors.

The concept of flow, or circulation, of the current assets can be made to include the fixed assets. Not only is cash converted into inventory in the operations of the business through the manufacturing, processing, or servicing carried on by the company, but its fixed assets also enter into the product. The operations consume a certain portion of the fixed assets; this consumption, known as *depreciation,* appears in the finished product, and is recovered from the sale of the finished product. If production is viewed as an economic process, cash may be seen to emerge from the fixed assets, and the latter can be regarded as an important source of current funds. Financial analysts give the matter especial attention during depression periods, when every possible source of funds becomes important. Certain companies and certain industries have been able to maintain their net current assets, or working capital, intact during the depression because of the gradual conversion of fixed assets into current assets without a corresponding reinvestment in fixed assets, even though operating losses or interest payments were acting as a drain.[3]

A simple hypothetical case will serve to illustrate the change from

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The relationship between fixed assets and current assets, through depreciation, is discussed by A. H. Winakor, "Maintenance of Working Capital of Industrial Corporations by Conversion of Fixed Assets," *Bureau of Business Research, Bulletin No. 49.* (Urbana: University of Illinois, 1934). This study discusses the concept of conversion of fixed into current assets through depreciation and presents the results of a study of 182 industrial corporations from 1928 through 1932. Even in the least favorable year, 1932, the depreciation earned and presumably recovered amounted to 11 per cent of the working capital (net current assets) for mine industries. For certain industries, notably coal and coke and petroleum, this figure was as high as 20 per cent (including depletion). Large steel companies and the cotton, cement, and automobile industries showed recoveries from fixed assets of 5 to 10 per cent of their working capital *(ibid.,* p. 39).

This study of depreciation as a source of working capital is continued through 1933 in a later publication of the same author, "Capacity to Pay Current Debts," *Bureau of Business Research, Bulletin No. 53* (Urbana: University of Illinois, 1936).

fixed to current assets. Suppose a manufacturing company begins business with a balance sheet as follows:

Current Assets	$ 50,000	Current Liabilities	$ 20,000
Building and Machinery	40,000	Funded Debt (6%)	40,000
Land	10,000	Net Worth	40,000
	$100,000		$100,000

Assume further that income before depreciation and interest averages $7,200, that 5 per cent annual depreciation is charged on the Building and Machinery item upon a straight-line basis, and that all net income after interest and depreciation is distributed in dividends each year. At the end of ten years, if no bonds have been retired, no new outside funds have been acquired, and no fixed assets have been replaced, the balance sheet will show the following:

Current Assets		$ 70,000	Current Liabilities		$ 20,000
Building and Machinery	$40,000		Funded Debt		40,000
Less Reserve for Depreciation	20,000	20,000	Net Worth		40,000
Land		10,000			
		$100,000			$100,000

What has happened may be pictured roughly from the following profit and loss statement for a year:

Sales		$100,000
Cost of Goods Sold	$65,000	
Operating Expenses (excluding depreciation)	27,800	92,800
Balance		$ 7,200
Depreciation		2,000
Net Income		$ 5,200
Interest on Bonds		2,400
Net Profits		$ 2,800
Dividends		2,800
Change in Net Worth		0

The sales, the purchase of the goods sold, and the operating expenses other than depreciation would all ultimately flow through the cash account. On a particular balance sheet date this statement might not hold strictly true. A sale might still appear as an account receivable not yet collected in cash, or certain inventory purchases might be unpaid for and be reflected in accounts payable.

A more correct statement would be that the sales of $100,000 and the costs and expenses of $92,800 would be reflected in the current asset—current liability, or working capital, position. Their net effect would be to increase working capital $7,200. Of the three remaining items, the interest on bonds and the dividends, totaling $5,200, would reduce cash and therefore working capital by that amount. The depreciation of $2,000, however, is an expense (that is, reduction of Net Worth) that reduces the fixed assets rather than cash. The net result is that, with total assets unchanged, the fixed assets have shrunk and the current assets have expanded by $2,000.

It is stating the matter loosely to say that depreciation allowances have added to the current assets. Actually, the cash comes from the sales of the business, and the fact that all the revenues from that source went for cash expenditures in the form of costs and expenses, interest, and dividends, except for $2,000, left that amount to increase working capital. In effect, we have the conversion of fixed into current assets. The fixed assets are being used up in the production of the goods and services sold by the business, just as labor's efforts and the raw materials are being consumed. Over the long run a continuing business will have to utilize sums of cash equal to the depreciation allowances in order to replace depreciated assets, but in a particular year in which no replacement occurs the working capital benefits. In a year of depression, when the company is hard pressed, replacements will be held to a minimum, and any cash on hand will be diverted to the most urgent needs of the business, such as current indebtedness, interest on funded debt, or sinking fund requirements.

While, in practice, all other items do not remain static, as in our illustration, the figures do serve to bring out why the practitioner thinks of depreciation and depletion allowances as a "source of funds." In a business which has revenues enough to cover all of its expenses and payments to investors but no surplus over and above these amounts, there will nevertheless be this tendency for the current assets to mount as the fixed assets show a declining book value because of the increasing reserve, or allowance, for depreciation. The final result of such a tendency will depend upon other decisions. Instead of an increase in current assets, the funds may go to replace or add to fixed assets, to decrease current or fixed debt, or to retire stock, or they may be absorbed in operating losses or in paying currently unearned amounts to bondholders or stockholders.

"Permanent" and "temporary" current assets. The volume of current assets required for the conduct of almost every business fluctuates somewhat with the change of the seasons. The smallest amount needed when seasonal requirements are at their lowest ebb may be thought of as "permanent," even though the individual

items are constantly "circulating." Any amount in excess of this sum up to the maximum, when the seasonal peak occurs, might be regarded as "temporary" current assets. In the case of a straw-hat manufacturer, the need might be almost wholly temporary by this measure. From almost nil his inventory would rise to its peak just before his deliveries began. Then, as shipments were made, the amount he would have tied up in customers' receivables would grow. If the credit term were at all substantial, his peak investment in current assets might be marked by the high point of the receivables figure rather than the inventory maximum. As his customers paid their bills, the required current assets would shrink to a negligible figure. In contrast, a retail grocery would be expected to show a fairly constant current asset total. Even such a business might show some fluctuation if it were located in a neighborhood where many of the customers went off for long vacations or were seasonally unemployed.

Ideally, it would seem that an amount equal to the permanent current assets should be raised from the owners and long-term creditors of the business and that the temporary assets should be financed with short-term credits. Actually, we shall see that for various reasons this standard is not the rule in practice. While it has been necessary to point out the problem before discussing the factors which determine the need for current assets, the pros and cons can be best stated after studying short-term credit sources in operation.

Current Asset Requirements

Factors determining the amount of current funds required. The factors which determine the total need for current assets may be found by examining the individual assets. A general list would read as follows:

I. Inventory.
   1. Volume of sales.
   2. Distribution of sales throughout the year.
   3. Operating conditions.
      (a) Need for securing stock in advance of manufacture or sale.
      (b) Period of manufacture.
      (c) Time interval between manufacture and sale.

II. Accounts and notes receivable.
   1. Volume of credit sales.
   2. Terms of sale.
   3. Collection policy.

III. Cash.
    1. Current needs.
    2. Emergency needs.

IV. General factors.
    1. Efficiency of management.
    2. Attitude of management.

I. Inventory requirements. Whether a business is newly promoted or well established, it must make some sort of estimate of the volume of business which it hopes to do. On the basis of probable sales volume a further estimate can be made of inventory needs. However, the assumption of a relation between annual sales and average stock on hand must be qualified by remembering that in some lines of business a certain minimum stock will be needed in order to give customers satisfactory service no matter how small sales may be. Estimates of inventory, then, are based partly upon the sales expectations and partly upon the need to stock a sufficient amount to enable customers to select from a reasonable variety of goods and get prompt deliveries.

But as between two concerns doing an equal volume of business, one may have a steady month-to-month business and the other a concentration of its sales in a busy season of a few months. The first will require a relatively small inventory throughout the year; the second will require a larger inventory but only for a brief period.

Inventory will also be governed by operating conditions. If supplies have to be purchased in large lots and transported a long distance, stock will have to be acquired some time in advance of need. In the same way a manufacturer who has a slow production process will have to have a large number of units in process at any given time. As for finished goods inventory, the shorter the interval between production and sale, the less will be the sum tied up in that item; risk of loss from a declining price level will also be minimized.

II. Investment in customers' receivables. The business which grants credit to its customers is obliged to finance not only its own inventory but also the goods which it has put on the shelves of its customers. The greater the volume of credit sales and the longer the term of credit granted, the more this investment in receivables will be. But, even when different concerns in the same industry grant similar credit terms, the payments of customers will vary with the vigor and skill of the collection policies of the different creditors.

III. Cash needs. The amount of cash which a business will feel it needs will be partly a matter of rule of thumb--a certain number of days' expenditures or a percentage of current assets—and partly what the managers feel they can supply. In theory, some attempt

should be made for a business that is in an industry that fluctuates or is greatly affected by the business cycle to provide a surplus of cash in good times for emergency needs. In practice, such a business, if ably enough managed to foresee such emergencies, is likely to use good times to reduce indebtedness and so have unused credit for the day of adversity rather than actually accumulate idle balances. The occasional concern that is blessed with an abundance of cash and wishes to retain it for later emergencies is likely to invest it while awaiting its use.

IV. *Management factor.* After enumerating the several current assets and the factors that govern their size, the problem of determining the financial requirements they represent would seem to be covered. Strictly speaking, they do cover the matter, but for the sake of emphasis we might add that management is an important influence even where the physical or operating conditions are alike. An efficient management will manage to get along with reduced investment by speeding the turnover of its inventory, by eliminating dead stock, and by keeping receivables low through a vigorous collection policy.

In some cases the managerial influence varies not so much in efficiency as in attitude. Thus, a management able to command sufficient funds might include slow-moving items in inventory because an extra profit margin justified that course or because it builds customer goodwill to be able to sell from a more varied display of stock. Again, an executive may decide that increased credit risks are likely to bring profits that will more than offset the greater bad-debt losses and pay a return on the greater investment in receivables. These differing attitudes are the result of differences in temperament—the conservative versus the speculative—in ability to command funds and credit, or in the character of a peculiar clientele. These differences are mentioned here because too often adverse judgments are rendered unfairly on the basis of standards much too rigid for such a variable as business practice.

The factors or considerations of importance in determining the current asset requirements having been outlined, four main questions have to be dealt with: (1) How is the current position measured or tested? (2) How can current funds be conserved? (3) How are current funds controlled and budgeted? (4) Where can current funds be obtained? The last question, involving the sources of short-term credit, constitutes the subject matter of the two chapters following.

Tests of current position. Management must not only be interested in the efficiency of internal operations but also must consider how creditors and investors will react to the picture of condition shown in the accounting reports. Familiarity with the tests these

outsiders are likely to apply may enable the business to pass them more creditably and make as good .a showing as possible. The short-term creditors are the most immediately interested in the current position. Investors in the bonds and stocks of the company are primarily interested in earning power and study current position merely to assure themselves that insolvency is not imminent.

Commercial banks and trade creditors who extend credit for short periods wish to feel assured that payment will be made at maturity or, if the unexpected should arise and payment should be postponed by the force of circumstances, that a sufficient margin of safety exists to assure them of eventual payment in full. While the whole gamut of information utilized by a competent credit grantor cannot be reviewed here, his two main recourses may be indicated. He may seek the "ledger experience" of the would-be debtor with other parties, and he may obtain financial statements of the business.

The former information is obtained from credit agencies or correspondence with creditors and indicates the debt-paying record of the credit applicant—whether he pays cash, pays promptly at the end of the stipulated credit period, or is slow. Such information is called "ledger experience" because it can be obtained by reviewing the debtor's ledger account. A more precise idea of the credit applicant's position can be obtained from his financial statements. The use of the latter has grown greatly in recent years. The points which are usually given the greatest attention are the following:

1. ***The current ratio.*** The ratio of the current assets to the current liabilities is usually checked first. The higher the proportion of current assets to current debt, the greater is the probability of prompt and full payment of the latter. A banker's rule of thumb is often stated to be that this ratio should not be allowed to fall below two. On the assumption that the current assets are all available for paying current debts only, a business with a two-to-one ratio could see the current assets liquidated for 50 per cent of their book value and still have a sufficient amount to pay the current debt in full. The higher the current ratio, the smaller is the percentage of realization' required in liquidation to pay the creditors without loss upon their part.[4]

From this idea of a minimum current ratio in order to' insure the safety of creditors can be developed the idea of a proper line of credit from a study of the current position. The current assets are obtained either from the current creditors or the long-term investors, the contribution of the latter being called the ***working capital.***

[4]For a fuller discussion of this and other ratios involved in the study of the current position, including certain limitations in their use, see H. G. Guthmann, *Analysis of Financial Statements* (New York: Prentice-Hall, Inc., rev. ed., 1935), Chapters IV and V.

If current creditors insist that two should be the minimum current ratio, they are, in effect, saying that not less than one half of the current assets should be represented by working capital and not more than one half should be supplied by themselves as a group. This standard sets the total line of current credit at not more than the working capital and so limits the expansion of current assets by the use of credit to a proportion of working capital. When the current ratio is two, the corresponding ratio of working capital to current debt is one. Should a certain line of trade decide that the minimum current ratio should be three, it would be limiting the contribution of the current creditors to one third of the current assets. With the permanent working capital as the known element, the line of credit could be computed by noting that a three-to-one current ratio means a two-to-one working capital to current debt ratio. The latter ratio will always be one unit less than the current ratio. The reciprocal of the working capital to current debt ratio can be used to obtain the maximum percentage which the "line of credit," or maximum current debt, should bear to the working capital.

Minimum Current Ratio	*Corresponding Ratio of Working Capital to Current Debt*	*Current Debt to Working Capital*
2	1	100%
2z	1z	661%
3	2	50%

In practice it is next to impossible for the individual creditor to limit the debtor's use of credit unless the debtor buys from a single supply house or borrows from a single bank and pays everyone else cash. But, if the debtor's balance sheet shows that he has violated the limitations of the credit market, he is likely to experience credit curtailment if that has not already been the case as a result of tardy payments to creditors because of his excessive indebtedness.

But the ability to be a good debtor depends upon the quality as well as the quantity of the current assets which are used in the current ratio test. The following ratios are used to test the probable quality of the individual current assets.

2. *Merchandise turnover.* As a measure of operating efficiency the cost of the goods sold in a given year is compared with the average merchandise inventory to obtain the merchandise turnover. The more sales a business can make with a given investment in inventory, the more efficient operations are deemed to be. For the purpose of checking the inventory figure in a given balance sheet, that figure rather than the average inventory for the year is corn-

pared with the goods sold (at their cost) to obtain the turnover check. This test assumes that the seasonal fluctuations are not so great as to destroy the value of the ratio.

When the inventory is apparently in excess of normal requirements on the basis of this turnover test, credit analysts are inclined to suspect overvaluation or dead stock of doubtful value. Even though the excess is sound stock properly valued, the fact of slow turnover is likely to mean slower than normal liquidation and so tardy realization for debt-paying purposes.

3. *Receivables test.* The receivables of customers are of substantially equal importance to the inventory in many businesses. As an account or note receivable gets older, the probability of collection grows less. As a device to test the age of the receivables the credit sales of the business for the previous years are divided by 360 to obtain the average daily credit sales. By dividing the resulting figure into the total amount receivable from customers the "number of days' sales uncollected" is found.

If the credit term in a given line of business is 30 days and the terms of sale were strictly observed, the receivables at the end of any period should be equal to the credit sales in the 30 days just preceding. Since the ratio is based on the average of credit sales for the year, any considerable seasonal variation may disturb the meaning of the ratio. If the sales were heavy in the month just before the balance sheet was taken from the books, the amount of receivables would appear unduly high. In this respect the creditors in a given line of business will have the experience of the group to allow for any eccentricities of this sort. Should the credit analyst find much more than the conventional amount of credit outstanding in the debtor's statement, he is very likely to attribute the excess to old and uncollectible accounts, which, in the absence of any explanation, he will mentally eliminate from the current assets available for supporting debt.

4. *Cash position.* While no standard ratios are available, or indeed practical, for measuring the adequacy of the cash account, the reader of a balance sheet invariably notes the proportion of cash. He compares it with the total current assets and the current liabilities. In a comfortably financed business it probably will not run less than 5 to 10 per cent of the current assets. Since the current debt is not expected to run more than one half of the current assets, the cash percentage should run not under 10 to 20 per cent of it. On the one hand, concerns do survive with less cash ; on the other hand, very strong companies may show cash sufficient to cover all current indebtedness.

The functions of cash in a going concern may be said to be three:

(1) to meet running expenses and bills, so that there may be no delay in payment at maturity, (2) to satisfy bankers as compensation for the use of checking and collection facilities, or to assure a line of credit, and (3) to meet business emergencies. The individual business will give consideration to these needs as the exigencies of financing and earnings permit. Most concerns will not accumulate cash for the third purpose but rather tend to build up a strong position by paying off current debt and thereby acquire unused credit lines for emergencies. If excess funds accumulate beyond this point, they will usually be invested in liquid form, such as short-term Government obligations that can be readily converted into cash without loss.

Since appearances as well as needs are important, a business should attempt to show a reasonable amount of cash on hand in its financial statements. Sometimes a concern will even borrow for that purpose at the end of the year, when a balance sheet is due. Such borrowing will increase current debt and lower the current ratio, but it will nevertheless improve the total showing by avoiding an inadequate cash balance.

This discussion of appearances leads naturally to the suggestion that management may materially improve the balance sheet showing by choosing a fiscal year which ends at a time when business is at its seasonal ebb and the current assets are reduced to their low point. At that time cash squeezed from the inventory and receivables can be used to reduce current debt to a minimum. The current ratio will be at its best then, and other ratios will appear to the best advantage. The point may be illustrated by assuming that the current position at the end of December shows inventories and receivables at a high point, while two months later they have been reduced by one third.

WORKING CAPITAL POSITION

	December 31		
Cash	$ 2,000	Accounts & Notes Payable...	$12,000
Receivables.	12,000	Accrued Expenses	1,000
Inventories	12,000		
Total Current Assets	$26,000	Total Current Liabilities	$13,000
Working Capital			$13,000
Current Ratio			2

In the interval, one third of the receivables and of the inventories, amounting to $8,000, is converted into cash and then used to reduce the current liabilities by that amount.

	February 28		
Cash	$ 2,000	Accounts & Notes Payable	$ 4,500
Receivables	8,000	Accrued Expenses	500
Inventories	8,000		
Total Current Assets	$18,000	Total Current Liabilities	$ 5,000
Working Capital			$13,000
Current Ratio			3.6

All of the ratios mentioned above are better at the end of February than at the end of December for this concern. The change is wholly due to the seasonal element, but, since readers are prone to ignore such factors unless they are brought to their attention forcibly, it is legitimate and desirable to arrange affairs so that they will show to advantage. Such a "putting of one's best foot forward" is not to be confused with what has been termed in credit circles as "window dressing"—a procedure designed to deceive creditors. When a concern discounts or borrows upon notes or accounts, it may, after using the cash to reduce current debts, ithproperly omit them from the balance sheet as though they were collected. The business still has a responsibility for the collection of these receivables and is contingently liable to the lending agency. Any qualified public accountant would insist upon such transactions being fully reflected in a balance sheet bearing his certificate.

In passing, other benefits from a fiscal year ending upon an advantageous date may be mentioned. At such a time inventory will be low and therefore easier to count and appraise. The employees are freer to do such work at a time when business is seasonably slow. Public accountants are generally more readily available to perform audit services for concerns which do not close their accounts on the conventional calendar-year basis.

In concluding, the advantages of being properly conscious of the financial tests being applied by creditors should be appreciated. It is not a mere matter of appearances. A strong current ratio is a matter of financial strength. A high merchandise turnover means sound selling policies; dead inventory is not being allowed to accumulate. A low ratio of receivables to sales means vigorous collections and an unwillingness to self-deception through keeping uncollectible items in the balance sheet as good assets. Adequate cash balances mean reserve strength to meet contingencies and favorable relations with the banker.

Conservation of Working Capital

Importance of adequate working capital. For successful financial management adequate working capital is the first requirement

for preserving good trade and bank credit, for meeting all expenses and liabilities promptly, and for taking care of emergency and special needs. On the other hand, redundant current capital reduces the return on investment and encourages waste and manipulation. Each dollar of current funds should do as much work as possible, but idle and unnecessary dollars might better be distributed to the owners of the corporation or be used to reduce debts and save on interest charges.

Most concerns are troubled with a paucity rather than an excess of working capital. For them the problem is one of conserving their current funds. This means (1) avoiding any unnecessary investment in the operating current assets, (2) avoiding contractual relations likely to prove a fatal drain upon cash in hard times, and (3) operating efficiently so as to minimize losses and maximize profits, with their consequent effects upon working capital. Unnecessary investment in inventory and accounts receivable has already been discussed. The second point refers to the assumption of fixed responsibilities in such matters as bond interest, rentals under long-term leases, and sinking fund obligations that may prove a threat to solvency. Considerable purchases of equipment on the installment plan might also be mentioned. The third is really a matter of general efficiency and goes beyond the scope of financial discussion into the field of business management. A purchasing department that buys economically, keeps supplies low by standardizing purchases for the various departments, and coordinates purchases with production is conserving the current funds. So also is the production department that keeps costs low and coordinates production closely with sales requirements. Similarly, the cooperation of sales and credit departments can minimize credit losses and expedite collections, so that the investment in receivables is kept down.

If this list were elaborated upon, it would lead us into a discussion of every phase of business activity. It is merely suggestive of the main policies by which working capital is conserved and efficiently used. As has been mentioned previously, practically all activities of the business have an effect on the current position. It is particularly important, therefore, that working capital needs be properly estimated and controlled, and this subject leads us directly to a discussion of budgeting these particular financial requirements.

Budgeting current requirements. The problems of financial administration are (1) to determine the amount of funds required by the business; (2) to raise those funds as cheaply as possible, with due regard to the long-run safety of the organization; and (3) to arrange the distribution of the net income that arises from the operation. We are interested at this point in only the first two of these points, and in them only in so far as they concern the current

assets. How is the amount of needed current funds determined, and how shall this amount be raised?

Budgeting the cash and other current asset requirements is the businesslike method of answering the first of these questions. An answer to the second question is essential before the budget is complete. The budget itself is not a system of control, but a plan designed to coordinate the activities of the business and provide a basis for the attainment of the goal of solvency and profitability. Sound management will recognize the fallibility of any human plan and allow for such revisions as the passage of time shows to be necessary.

The cash budget. The cash budget is an estimate of the various cash receipts and disbursements which are expected within a future period of time and has been adopted as a plan for controlling and keeping the operations and expenditures of the various departments of the business within appropriate bounds. The master cash budget would have to include not only the flow of cash for ordinary operations but such items as capital outlays for fixed assets and for debt retirement, and the sources of the money to cover these expenditures. Such planning becomes especially vital (1) where the business has to watch its cash closely because of a lack of working capital, and depends upon short-term credits, (2) where the business is fluctuating, and collections from sales and expenditures for running expenses do not jibe closely, and (3) where the business unit is large and needs skillful coordination of its various parts.

In a large organization this controlling budget will be broken down into departmental budgets, with a sales budget, production budget, and whatever other divisions fit the administrative divisions of the business.[5]

Estimating cash receipts and disbursements. Estimated receipts from cash sales during the budgetary period, from the receivables expected to be collected during the period, from the sale of any capital assets, and from investments and miscellaneous sources are itemized and spread out over the fiscal year by months. The estimated cash disbursements, likewise derived in large part from the different departmental estimates, are spread over the months and then deducted from the estimated receipts. Any cash deficit at the end of a monthly period indicates the amount which will have to be cared for by existing cash balances or be obtained from some source

[5] The subject of budgetary procedure is a large one, and a more adequate discussion will be found in J. 0. McKinsey, *Budgetary Control* (New York: Ronald Press Co., 1922) ; National Industrial Conference Board, Inc., *Budgetary Control in Manufacturing Industry* (New York: The Board, 1931); F. H. Rowland, *How to Budget for Profit* (New York: Harper & Bros., 1933); Prior Sinclair, *Budgeting* (New York: Ronald Press Co., 1934) ; and John R. Bartizal, *Budget Principles and Procedure* (New York: Prentice-Hall, Inc., 1940).

outside of the business. Since "receipts and disbursements may not coincide within the month, it would be wise to start with a balance in sight of at least enough to care for a month's disbursements. Any excess of cash receipts may be applied to the reduction of current liabilities or be available for unbudgeted cash expenditures, such as the retirement of securities not required by contract, or dividends. Cash disbursements, for a manufacturing concern, include disbursements for production costs to be paid for in cash during the period, such as materials, labor, and manufacturing expenses, the selling, general, and administrative expenses, the financial and miscellaneous expenses, and taxes. In addition to these disbursements, any accounts and notes payable maturing during the period must be planned for in the total.

Since the purpose of the cash budget is to serve as a plan or guide in managing current funds, it must be constantly revised and kept up to date in the light of new developments. Every item is an estimate, and, as time passes, actual experience is likely to require the revision of the original estimates. If the estimates have been carefully made, and if the budget is conscientiously used as a basis for control, undue revision is avoided. But there are always developments which the management cannot foresee or forecast accurately.

Planning the source of current funds. The cash budget has provided the estimate of the amount of cash, if any, which the business will need in addition to that supplied by current receipts. This amount may be for special, seasonal, or emergency purposes, or it may be the "permanent" type of current funds, which the business would do well to consider as fixed as its fixed assets. If the needed cash is only temporarily required, the cash budget plus the company's balance sheet provides the basis for negotiating a bank loan, for selling commercial paper, or for otherwise obtaining temporary funds.

Temporary excesses of cash disbursements over cash receipts that cannot be cared for out of existing cash balances are ordinarily met either by (1) converting marketable securities into cash, (2) negotiating new loans, (3) renewing bank loans or obtaining extensions on trade debts, (4) obtaining special advances from friends, officers, directors, or stockholders, or (5) resorting to special sources of current funds, such as finance and discount hotses, the commercial paper market, and other sources described in the next chapter.

Relating the budget to the financial statements. The cash budget sets forth the results of contemplated operations in terms of cash requirements. In other words, it shows what is expected to happen in the way of cash needs. It is related to, but is not to be mistaken for, the statement of profit and loss. The profit and loss

statement will reflect purchases and sales when they occur without regard to when the cash is paid or received. The accountant reports in the profit and loss statement all income as it is earned and all expenses as they are incurred (accrual accounting) and does not wait until cash has changed hands. Many cash transactions cause neither profit or loss and so are not reflected at all in that statement. This is true of purchases of assets, repayment of liabilities at their face amount, and amounts received from financing. An estimated profit and loss statement will include many of the transactions that are used in making up the cash budget, notably the sales for cash and most of the. expenses. In general, the test of inclusion in the first statement will be whether or not the transaction includes an element of gain or loss for the owners of the business. The element of timing will make the other major difference between the budget and the earnings statement. Thus, a sale enters profit and loss as soon as the inventory is disposed of and converted into an account receivable; it affects the cash budget at the point of time when the account is collected in cash.

As for the balance sheet, the cash budget might be thought of as portraying the estimated course of one item in it—namely, cash. Actually the transactions which had to be forecast in the construction of the budget and the profit and loss statement will enable the plotting of the various elements of the current position. The sales represent the conversion of inventory into cash or receiyables, usually at a profit that increases working capital and surplus. The schedule of collections for receivables used in the construction of the budget will give the timing of the conversion of the accounts and notes into cash. The budget of purchases will indicate the growth of inventory and either the reduction of cash or the increase of accounts payable. When accounts payable are allowed to run for a period, the schedule of payments used in the budget will tell us when the cash should flow. from the balance sheet to reduce that current debt. The ordinary operating expenses will drain cash and shrink working capital.

The construction of a series of estimated monthly balance sheets on the basis of operations used in making up the cash budget and the estimated profit and loss statement but omitting any financing would show a cash account, the rise and fall of which would indicate the need for short-term credits or more permanent financing. The need would amount to the cash deficiency plus whatever amount the management deemed necessary for normal working balances.

As McKinsey has pointed out, "the financial budget, the estimated statement of profit and loss, and the estimated balance sheet are the three statements which show the goal towards which the contemplated operations of the business, as reflected in the departmental

estimates, are leading. If these statements are properly made and properly correlated, a basis for sound and efficient management is laid."[6]

Using the budget for control purposes. The budget can only provide a plan; it is up to management to make sure that the plan is put into effect. After the estimated cash receipts and disbursements have been calculated, the budget committee has considered them in connection with the various departmental estimates and made such revisions as appear necessary, and the whole has been approved by the responsible executives, the parts are transferred to the respective heads of the various departments concerned. They should be required to be guided by the estimate and to submit periodic reports back to the committee, showing a comparison between estimated and actual receipts and disbursements. These reports and any well-considered requests for necessary changes then form the basis for revisions in the budget. The demands for cash are imperative demands. If revisions in the amounts to be borrowed are at all likely, a line of credit arranged in advance should cover possible additional borrowings to care for the unforeseen needs.

It is worth repeating that no budget will work as an automatic controller. But a carefully drawn budget in the hands of an efficient management is a most valuable tool for the determination and control of current financial requirements.

[6] McKinsey, *op. cit.,* pp. 329-330. The extent to which manufacturing companies use estimated balance sheets and profit and loss statements as budget summaries is reported in National Industrial Conference Board, Inc., *op. cit.,* Chapter X. Of the companies included in the survey, about one half prepared profit and loss budgets, and less than one quarter prepared balance sheet budgets.

CHAPTER 19

SHORT-TERM FINANCING *(Continued)*

THE distinction between current assets and working capital has been indicated in the preceding chapter. Since the latter represents the portion of current assets financed from long-term sources, that aspect of the financing has been covered in the discussion of stocks and bonds. Many of the financial troubles of the businessman would be eliminated if these permanent, or nearly permanent, sources of funds could be used to provide all of the financing. But, as long as access to the long-term capital markets is difficult and the means of those who control the business are limited as compared with the needs of that business, sources of short-term credit will be important.

Sources of Current Assets

Classification of sources. A full outline of the sources of the current assets will include both the working capital sources and the institutions which extend short-term credits. We shall be concerned with the latter in this and the next chapter. All of the short-term financing represents credit rather than owned funds and so is subject to the hazards which arise from borrowing plus the fact that short maturity makes it a continuing problem to maintain solvency. Another possible disadvantage of such credit may lie in its high cost when drawn from certain sources. Presumably, however, the user of such credit finds it profitable to employ it, or he would not engage in the transaction, although it is possible that he may be the victim of weak finances and so may be obliged to endure onerous terms as the price of bare survival. Short-term credit, like any credit, enables the expansion of operations beyond what would be possible with the owners' limited means—the advantage of trading on equity. A special advantage lies in its availability at times when it is impossible to raise funds by the sale of stocks or bonds. A further merit is that, when the financial need is temporary, the credit can be paid off and the cost of borrowing can be kept down, whereas a long-term loan means a continual burden of interest cost even when the funds are sometimes idle.

SOURCES OF CURRENT ASSETS

A. Sources of long-term funds, or working capital.
   1. Stockholders, or owners.
      (a) Direct investment, shown as Capital Stock or Paid-In Surplus in balance sheet.
      (b) Indirect investment, through earnings retained in business, shown as Earned Surplus.
   2. Borrowed funds.
      (a) Bonds and corporate notes.
      (b) Mortgages.
      (c) Miscellaneous loans, as from officers and directors.

B. Short-term sources.
   1. Commercial banks.
      (a) Unsecured loans.
      (b) Discounting notes and acceptances from trade customers.
      (c) Loans secured by inventory.
      (d) Loans secured by stocks and bonds.
      (e) Bankers' acceptances.
   2. Commercial paper houses.
   3. Trade creditors.
      (a) Open book account.
      (b) Notes, bills, and acceptances.
   4. Advances on contracts.
   5. Finance, discount, and commercial credit companies.
   6. Factors.
   7. Special public or quasi-public institutions.
      (a) Reconstruction Finance Corporation.
      (b) Federal reserve banks.

   Miscellaneous sources, such as officers, directors, stockholders, friends, and affiliated companies.

Means of obtaining current assets by switching funds around within the business are not included in the foregoing list, save in the case of retention of earnings, since they constitute the changing employment of funds already raised from some source rather than an independent "source." A concern may, for example, dispose of fixed assets or of investments in order to increase current assets. As pointed out in the preceding chapter, a business that does not make replacements or additions to the fixed property in an amount equal to the depreciation and depletion charges will tend to have that much added to the current position, if it is assumed that revenues have been sufficient to cover such write-offs.

Since current indebtedness ordinarily is limited to some fraction

of the current assets, it is not thought of as a means of financing fixed assets. Because of the financial risk it is regarded as unsound practice to employ such financing except where the current debt is to be refunded shortly into bonds or stocks. In practice, however, a business may expand its current liabilities whenever they are not up to the maximum limit ostensibly for current purposes but actually to finance fixed asset expansion. Such a use of current credit for fixed purposes would be disclosed by the changes in the several sections of successive balance sheets. While such financing weakens the solvency position, it cannot be regarded as improper so long as the practice does not violate reasonable credit standards. It may represent the only practical avenue of financing, or it may merely have the advantage of relatively low cost.

Such a case is illustrated in the following condensed balance sheet figures. The use of current credit was relatively small, as indicated by its repayment within a short period out of current assets and sums allowed for depreciation that were not absorbed by replacements.

WHEELING STEEL CORPORATION

Comparative Condensed Balance Sheets as of December 31

(in millions)

	1936	*1937*	*1938*		*1936*	*1937*	*1938*
Current assets	$ 43.9	$ 44.0	$ 40.5	Notes payable	$ 0.0	$ 5.0	$ 1.0
Fixed property	122.6	127.3	124.2	Other current liabilities	6.5	5.7	5.4
Less deprec.	53.2	53.5	52.3	Funded debt	33.6	32.9	32.2
Net property	69.4	73.8	71.9	Preferred stock	38.3	38.1	38.2
Other assets	6.2	6.4	6.5	Common stock	28.8	28.9	28.9
				Surplus & reserves	12.3	13.6	13.2
	$119.5	$124.2	$118.9		$119.5	$124.2	$118.9

CHANGES IN BALANCE SHEETS

	1936 to 1937	*1937 to 1938*		*1936 to 1937*	*1937 to 1938*
Current assets	+0.1	-3.5	Notes payable	+5.0	-4.0
Fixed property	+4.7	-3.1	Other current liabilities	- .8	- .3
Less deprec.	+ .3	-1.2	Funded debt	- .7	- .7
			Preferred stock	- .2	+ .1
Net property	+4.4	-1.9	Common stock	+ .1	—
Other assets	+ .2	+ .1	Surplus & reserves	+1.3	- .4
	+4.7	-5.3		+4.7	-5.3

In the accompanying figures the notes payable are shown as expanding 5 million dollars in the year 1937, while current assets remained almost constant. The funds were used to expand fixed assets. In the following year the notes were retired out of current

funds, presumably because lowered business volume reduced current asset requirements. In a more normal year retained earnings might have been used. From the decrease in net property it might appear that fixed assets had also been disposed of, but closer examination indicates write-offs, so that depreciation allowances may have been another source of funds.

Bank Borrowing

Use of bank credit. The traditional role of the commercial bank has always been to provide business concerns with current funds to finance the various stages of the manufacturing, processing, and distribution of goods. In so doing, the bank collected, through its deposit function, the idle savings of the community and made them available to business concerns. Until a few years ago the commercial bank ranked along with trade credit as a major source of short-term credit for business purposes. That its traditional role in this respect has suffered greatly in recent years is evident from the data shown in Table 32 on earning assets of all member banks of the Federal Reserve System.

TABLE 32

LOANS AND INVESTMENTS OF MEMBER BANKS OF THE FEDERAL RESERVE SYSTEM

(in millions)

	June 30		
	1929	1933	1939
Loans to customers:			
For purchasing or carrying securities	$ 9,759	$ 4,704	$ 1,467
Real estate loans	3,164	2,372	2,828
Other loans to customers	11,618	5,049	8,368
Loans to banks	670	330	58
Open market paper purchased	447	403	420
Total loans	$25,658	$12,858	$13,141
U. S. Government obligations	$ 4,155	$ 6,887	$10,946
Other securities	5,898	5,041	8,516
Total investments	$10,053	$11,928	$19,462
Total loans and investments	$35,711	$24,786	$32,603

Source: *Federal Reserve Bulletins.*

While loans secured by stocks and bonds and by real estate may be made to businesses, such security is the exception. Business and agricultural loans are regarded as constituting the bulk of "Other loans to customers" as well as the "Open-market paper purchased." The latter paper is distributed for the most part by the commercial paper house, whose operations are discussed later. A significant shift has taken place from loans of all kinds as the main form of earning asset to investments, particularly United States Govern-

ment obligations. The factors which have brought about this change have probably been (1) changing purchasing policies on the part of business, resulting in the carrying of smaller inventories; (2) the growth of other institutions supplying current funds; (3) the increased dependence upon owned capital, resulting from the experiences of business during the critical banking period 1932-1933; (4) the pressure on the part of banks to emphasize liquidity rather than earnings; and (5) the increasing strictness of bank examinations.

While the commercial bank still remains an important source of funds for a large number of corporations, it is doubtful whether it will ever regain the place it once occupied in the provision of current funds—at least until it feels able to assume greater risks. The banking situation has undoubtedly been a prime influence. Commercial banks, under the pressure of stricter examinations and the lessons of a staggering crisis that cut their number almost in half, have been inclined to be more severe in their credit requirements. With their surplus depleted by depression losses, many did not feel able to take risks that might impair capital stock and lead to their closing. Business concerns, particularly small ones, have had to rely more heavily than ever upon their own funds, which would include any earnings they might be able to retain.

A complete discussion of the relations of business and the commercial bank would involve us in an analysis of almost the whole field of commercial bank operations. These have been covered in works on banking and credit, and we shall confine our discussion to the most important questions which confront the business executive who is considering the bank as a source of funds.

Choice of a bank. To a business hoping to use bank credit, the choice of the bank is an important matter. The chief points likely to have a bearing on this decision are the following:

1. Size of the bank. As we shall see, there are economic and legal limits to the amount of credit which one bank may advance to a single borrower. A concern usually tries to use a bank capable of accommodating its maximum need for bank credit of the direct type. Occasionally a business may borrow from more than one bank, but this arrangement makes control difficult for the lenders, and they prefer that the relationship be exclusive. It is possible that, in choosing a bank that is larger than necessary, the concern may find the relation less intimate and satisfactory. A smaller bank may be more appreciative of the business than a large one and give better service because it is more anxious to please.

2. Lending policies of the bank. The prospective borrower is interested in the amount he will be permitted to borrow, the length of time he can leave his loans unpaid, and the cost of the borrowing.

The businessman will find that banks differ in their policies, their standards, and their familiarity with various lines of business. Even where borrowing is not contemplated, it is well to be familiar with these ideas of the banker in order to be prepared for emergencies or future expansion.

3. Personnel and directorial interests of the bank. When a choice is open, the business will make a connection with a bank that has familiarity with the line in which the company is engaged and therefore can give more appropriate financial advice. On the other hand, a bank which has close relations with competing concerns, as through a directorship, might be undesirable because of possible disclosures of confidential matters. Sometimes a banking connection may provide an avenue of approach to valuable business associations in the community.

4. Standing of the bank. When a business concern is in need of preserving and extending its credit, it will find it useful to associate with a bank of good standing. While it means little to have a deposit account with a conservative and well-known bank, the fact that the business is able to borrow from such an institution and to use it as a financial reference may enhance prestige and raise credit standing.

5. Safety of the bank. Closely associated with the standing is the soundness of the institution. Bank failure means not only the possible loss and embarrassment which comes from tying up the working cash balances of the business but also the loss of credit facilities at a time when it may be hard to find them elsewhere. As for the former, deposits in banks that are insured with the Federal Deposit Insurance Corporation are protected up to the amount of $5000. Such protection is useful for the small business but likely to be quite inadequate for a concern of any size.

6. Relations of the bank to other banks. A bank's lending ability is likely to be increased by favorable relations with correspondents and the Federal reserve banks (A correspondent bank is ordinarily a large bank located in a financial center which acts as a depository and serves as a bank for bankers.) In the past a large metropolitan correspondent bank would often lend to a country or small city bank for seasonal or emergency needs when the paper of the latter was not eligible under the strict requirements of the Federal reserve banks. Under the relaxed rules of recent years the Federal reserve banks can make loans to member banks on a very broad variety of security. If a commercial bank cannot fall back upon such support, its ability to care for the borrowing requirements of its customers may be limited at the very time when it is most needed.

In conclusion, the businessman should remember that he is in the best bargaining position at the time he is opening his account with the bank. At that time the bank is seeking to obtain his business, and he should endeavor to get a clear statement of its policy and standards. His credit will tend to grow with the passage of time, however, as the bank acquires that confidence which feeds upon association. For this reason, the selection of the right bank at the outset is desirable in order that a record of favorable relationships may be established as soon as possible and that later disturbing shifts may be avoided.

Borrowing on unsecured loans ; the line of credit. The single-name unsecured loan is the most common form in which ordinary commercial bank credit is extended. The discounted unsecured note became important after the Civil War, when the credit losses of that period led to the rise of credit sales on short terms with a heavy discount for cash. The large Cash discounts made it highly desirable for buyers to seek cash at their banks. Sellers likewise sought bank credit to carry them over the period required to process, sell, and collect on accounts receivable when the buyers could not pay cash.

In extending credit upon unsecured single-name paper or on accommodation paper, it is customary for the bank to establish a maximum amount which it will lend. This amount is known as the *line of credit.* (Accommodation paper is two-name paper, which bears not only the borrower's signature but also the endorsement of some other individual or concern that is willing to become secondarily liable without consideration in order to "accommodate" the borrower.) Once the line, based upon information developed by credit investigation and a study of the financial statements, has been set, the bank will ordinarily permit the borrower to obtain loans up to that figure without further negotiation. The terms of repayment would also have to be understood. Such a line would usually be subject to annual review. Since this matter is, as a rule, one of understanding rather than contract, the bank could modify the line at any time but would be unlikely to do so without good cause.

Many firms do not make a practice of borrowing regularly through a line of credit. Their need for bank loans may be sporadic and irregular. In such cases they are likely to negotiate for credit as the need arises, rather than establish a formal line of credit for the season's needs.

The bank will probably impose two requirements on its regular borrowers: (1) A percentage, varying on the average from 10 to 20 per cent of the line of credit, or at least of the amount of loans made, must be kept on deposit. (2) The loans must be "cleaned up"

at least once a year in order to make sure that the business remains liquid and to prevent the use of bank funds as permanent funds.

The "compensating balance" requirement has had a number of illogical rationalizations for its use—illogical because the suitable cash balances of a business have no reasonable relation to bank loans unless they are a subterfuge for raising the cost of the borrowing to the customer: Thus, if a borrower is obliged to maintain a 20 per cent balance against his loans and his requirements amount to $100,000, he would have to borrow $125,000, or 25 per cent more than he needed, in order to maintain the necessary idle balances. In this way he would pay interest upon a one-fourth larger sum than he needed, so that a nominal interest rate of 6 per cent would mean a real cost of 71 per cent, and a nominal rate of 8 per cent would really mean 10 per cent. If it is further assumed that such loans are required only for a seasonal need and the balances had to be maintained throughout the year, the cost of such loans would be even more inflated.

However, any business will require some cash balances if it is not to be harassed by the constant fear of slow payments and insolvency. A little calculation based upon the probable needs of the business itself will generally show that the balances should bear the relation to maximum bank loans which the "20 per cent" rule suggests. Furthermore, the bank has a right to expect compensation for the services it renders to its depositors in handling their checking accounts. Although service charges are possible, the more common device is a "compensating balance." Since the activity of a deposit account is likely to be related to the size of the business, we have here the logical basis for the bank's demand that a suitable average credit balance be maintained with it by that business.

The second requirement, that the business pay off all of its bank debt once a year, is designed to demonstrate that the loan is genuinely short-term and liquid, and so suitable for a commercial bank's portfolio. In practice, banks are often satisfied with nominal adherence to the rule; that is, it may be regarded as sufficient if the repayment is made even though it means shifting the burden only temporarily elsewhere. Three common devices are (1) to borrow from other banks, (2) to borrow in the open market through commercial paper houses (described below), or (3) to use trade credit, allowing accounts to run for the full credit term where ordinarily they would be paid at once to obtain the usual cash discount.

From the bankers' point of view, the borrower has demonstrated his ability to repay according to the understanding, and there is usually little concern over the fact that the loan has only been shifted and not actually liquidated. From the point of view of the borrower, the inability to obtain the needed funds upon any

other terms or upon such favorable terms drives him to the continuous use of short-term borrowing. Financial conservatism would dictate that, as soon as possible, he should arrange for permanent investment of the part of the current assets that is needed in the business continually. If no other source is available, earnings should be retained. Otherwise the business is assuming a risk which may be fatal at the first stroke of adversity.

Limitations on bank loans. Three types of limitation may be imposed upon the amount which the borrower may obtain from any one bank, particularly where the usual unsecured single-name paper is used: (1) limitations imposed on the bank's loans to one customer in order to assure diversification of its earning assets; (2) limitations arising out of the credit worth of the borrower; (3) limitations imposed by general business and credit conditions. Sound bank management recognizes the need for diversification, and the state and national banking laws are designed to insure that end by restricting the loans to an individual borrower in terms of percentages of the bank's capital stock and surplus. State banking laws are not uniform in this respect.

1. *Legal limitations.* The national banking laws now impose the following limits on commercial loans made to one borrower: [1]

(1) The bank may lend up to 10 per cent of its unimpaired capital and surplus to one borrower, subject to the exceptions below.

(2) In addition to the 10 per cent noted above, a national bank may lend

(a) 15 per cent of capital and surplus on notes (other than business or commercial paper) owned by the borrower, endorsed by him, and maturing within six months.

(b) 15 per cent of capital and surplus on notes secured by bonds or notes of the United States Government issued since April 24, 1917, or by certificates of indebtedness, Treasury bills, or obligations fully guaranteed by the United States Government.

(c) 15 per cent of capital and surplus on obligations secured by livestock having a market value of at least 115 per cent of the loan.

(d) from 15 per cent to 40 per cent of capital and surplus, depending on the excess of the market value of the commodities over the amount of the loan, on obligations secured by shipping documents, warehouse receipts, or evidences of title to staple commodities.

(3) No limitations are imposed on

(a) drafts or bills of exchange drawn in good faith against actually existing values.

[1] United States Revised Statutes, Section 5200.

(b) commercial and business paper of other makers owned by the borrower.
(c) obligations secured by commodities in process of shipment.
(d) bankers' acceptances.

The first two limitations suggest the difficulties of a large business trying to borrow from a small bank In addition, a bank located in an area that is dominated by one kind of manufacturing might feel constrained to be more conservative in its loans to the individual concern simply because of the greater risk of lending so much to companies all of which are subject to the same influences. When a business is located in a small city or town, this difficulty of size often leads the business to make banking connections in larger communities. In, this respect, branch banking, with its considerable size and scattered offices, has advantages for a borrowing business. On the other hand, businessmen have sometimes found local representatives of these large institutions lacking either the authority or the sympathy to make as generous advances as a purely local bank.

2. *Limitations imposed by the borrower's credit worth.* The bank will limit the amount lent to any one customer according to that customer's worth. It will make a detailed examination of the borrower's credit standing, deriving its information from the following sources:

A. Outside sources.
(1) Trade references.
(a) Trade creditors of the borrower.
(b) Other firms in the same line of business.
(2) Other banks which have had dealings with the borrowers.
(3) Commercial reporting agencies, both general and special.
(4) Credit exchange bureaus.
(5) Investment information services.
(6) Public records, such as bankruptcy petitions, suits pending, and mortgage registrations.
B. Bank's own sources.
(1) Interviews and credit investigators' inspections.
(2) Past history of the borrower as shown by the bank's records on such points as past loans, payment record, and deposit balances.
(3) Analysis of the borrower's financial statements.

A fuller discussion of these points would be warranted if we were considering the whole matter of credit analysis from the lender's point of view instead of merely suggesting what the business bor-

rower must submit to and be prepared for. [2] Not all banks investigate the credit standing of the borrower as thoroughly as suggested by the sources of credit information and the methods of credit analysis indicated in these pages. But, if the borrower deals with a sound and efficient bank, he may expect his credit standing to be rigorously evaluated. Such tests should be regarded as the price of association with a strong financial institution. The borrower can strengthen his credit standing by supplying necessary credit information to the proper credit agencies and his bank.

Stated in brief, the borrower may expect to have his credit standing analyzed at four points, which writers on credit call "the Four C's of credit."

(1) The *character* of the borrower. The "moral risk" is more important for small concerns than for the big impersonal corporations, but even for the latter the management's ability, honesty, and general willingness to pay is an important factor to be considered.

(2) The *capacity* of the borrower, or general ability to operate the business efficiently and profitably. Capacity as well as capital is revealed by the record of management in the financial statements of the business over a period of time. In addition, the kind of product, the trend of the business and of the industry in which it is included, the purpose of the loan, the regularity of operations, and similar factors are examined.

(3) The *capital* of the business, or financial resources and earnings available to pay the prospective loan, will be carefully analyzed, mainly from the financial statements submitted.

(4) The *collateral* to be offered, if any, may be a fourth point for consideration.

The third of the above factors deserves more extended treatment. The custom of requiring statements showing the balance sheet and earnings condition of the borrower grew up after the Civil War along with the growth of borrowing on single-name promissory notes. Having to extend credit to his own customers on open account, the borrower had no evidence of such debt to put up as collateral, and the bank was dependent on his statements of financial condition as evidence of ability to pay. The growth of acceptances, collateral loans, and specialized bank advances has not dimmed the importance of adequate statement information. The movement toward requiring adequate statements, especially for mercantile credit purposes, received a great impetus after 1913 from the inauguration of the Federal income tax law, which made it obligatory to keep adequate accounting records for making income tax returns.

The interested reader is referred to books emphasizing credit analysis from the banking and mercantile credit points of view. See selected references at the end of this volume.

About the same time the Federal reserve banks came into being and rose to importance during our participation in the World War, 1917-1918. The Federal Reserve Board requires that, whenever a member bank has rediscounted, or offers for rediscount, the obligations of a borrower amounting to five thousand dollars or more (or, in the case of banks having a capital of less than fifty thousand dollars, a sum equal to 10 per cent or more of the paid-in capital of the bank), that bank shall have in its own files a statement in respect to one of the names on the paper.

The credit department of the bank will examine the balance sheet and income statements with two main questions in mind: (1) Will the proposed loan be paid at maturity? (2) Will the proposed loan be paid ultimately, if unforeseen circumstances prevent its payment at maturity? Inspection of the individual items on the statements goes far to answer these questions. In addition, the ratios discussed in the preceding chapter are used to indicate significant relationships which help to throw light on the amount of bank debt the borrower can assume with safety. These ratios, it will be recalled, were (1) the current ratio, (2) the merchandise turnover ratio, or ratio of cost of goods sold during the year to inventory, (3) the receivables test, or ratio of customers' receivables to average daily credit sales, and (4) the test of cash position, or ratio of cash to total current liabilities and to total current assets.

Two other balance sheet ratios sometimes added are the so-called "acid test" and the assets to debt ratio. The former is the ratio of cash plus customers' receivables to the current debt. In the unusual event that the borrower had any marketable securities that could be sold, they might be added to the cash as cash equivalent for the purposes of this ratio. It is commonly held that this ratio should be not less than one. It places emphasis on the receivables as against inventory as a basis for credit. A receivable has the advantage from a creditor's point of view of being one step nearer to cash than inventory, and in being a claim to a fixed sum of money instead of goods subject to fluctuations in market value. If strictly enforced, the minimum ratio of one would practically bar from any important use of credit a business which was conducted on a cash basis and whose current assets were chiefly inventory. So also a concern in a highly seasonal business would not be eligible for much credit until the inventory had been sold and converted into receivables.

The second ratio, that of total assets to total debt, supplements the current ratio, which measures only the current debt coverage. An alternative ratio that measures the same fact is that of net worth to total debt. These ratios both indicate the coverage which the contribution of the owners gives to the creditors. The advantage of the second ratio is that it emphasizes the owner-creditor

relation, or the "trading-on-equity" feature; the disadvantage is that it draws attention away from the essential fact that it is the assets which must supply the wherewithal to pay creditors, and a careless user may fail to observe that the assets consist of intangible or doubtful assets if he looks only at the liability–net worth side of the balance sheet.

Since the banker often feels that more thorough study is warranted because he lends more to the business than does the average trade creditor and his relation is more permanent, he may go further and seek information in the earnings statement. Here he may obtain the operating ratio, the gross and net profit margins, the percentage earned on total investment and on net worth, and the total operating asset turnover. The operating ratio is the ratio of operating expenses to sales, or gross revenues, and, when it is subtracted from 100 per cent, gives the net operating profit margin, or percentage. The gross profit is the margin between the cost of goods sold and the sales figure before the various expenses of running the business are deducted. The net return upon total investment is the percentage relation between the net income (after all expenses including taxes) available for interest and dividends and the combined investment of the stockholders and long-term creditors, to whom the net profit and the interest payments belong. Similarly, the net profit, or the net balance earned for the owners, is compared with the net worth. As long as the current position is reasonably strong, the banker, unlike the investor, will not be greatly concerned about low earning power. Indeed, in some smaller corporations the apparently small net profits may be due to large salaries paid to major stockholders who are also the operating officers and who save on corporation income taxes by taking the earnings in that form rather than as dividends.

The operating asset turnover, already described as the ratio of sales to total assets used in operation, gives an idea as to whether the volume of operations is reasonable in relation to investment. If the investment appears excessive, the analyst will be interested in noting where the excess seems to lie—plant, inventory, or receivables —and whether the fault is in a failure to achieve a reasonable minimum volume sufficient to justify continued operation, an actual excess of investment over needs, or an inflated valuation of assets.

The possibility of improper accounting or even fraudulent financial statements means that a bank may well insist that the figures be audited and certified by an independent public accountant, if the amount of credit sought is more than nominal and is relatively substantial as compared with the credit worth.

3. *Limitations imposed by general business and credit conditions.* Even though the prospective loan may not exceed the limits

imposed by law or diversification policy and may meet the tests of credit analysis, the bank will also be influenced by the outlook for general business and credit. Banks in general may be tightening up on credit on their own accord or because of the influence of the Federal reserve banks. On the other hand, the outlook may be promising, and banks may be actively seeking outlets for investable funds. The credit accommodation which the corporation can obtain from its commercial bank is therefore influenced by factors outside of the credit standing of the company.

The foregoing discussion of limitations on the amount of bank credit available for current purposes applies particularly to the unsecured promissory note. But there are other types of loans which may be negotiated. These will be discussed briefly in the following sections.

Pledging or discounting accounts receivable. Commercial banks rarely make advances to a commercial borrower secured by the assignment of his accounts receivable, although in recent years their large supply of idle funds has led some banks to encourage this type of borrowing. They prefer either to make an unsecured loan, to refuse a loan altogether, or to require some other type of collateral. Whether the accounts are merely pledged or are discounted, the bank has the double problem of, first, investigating and checking the individual receivables and, second, following the collections as they are paid. If the business has such a poor rating that such security is necessary, either because of the credit standing or the capacity (business ability) factor, the bank is likely to feel the effort involved too expensive for its customary charges.[3] When accounts receivable are to be used as security, the tendency is to apply to the commercial credit company or discount company, which have special facilities for investigating and supervising this type of loan. The charges of these institutions are high enough to cover the extra work involved. The use of these specialized institutions is considered in the following chapter.

In the search for possible places to lend in the easy-money period after 1934, some banks were attracted to the personal loan field. This business suggested a plan for helping retail' merchants with considerable sums tied up in accounts receivable.[4] The merchant cooperated with the bank in getting the customer to borrow from the bank a sufficient amount to settle his account, the loan to be paid

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a In an unusual case that came to the attention of the authors, the supervision and collection of pledged receivables was handled by the trust department of a commercial bank making this type of loan. A charge was made for ;this service of the trust division.

G. F. Foley and R. E. Doan, "Financing Retail Store Accounts," *The Burroughs Clearing House,* December, 1935, p. 16, describes the plan of a Denver bank.

off in installments over a period of a year. Since the interest is added onto the face amount owing for a full year, while the loan itself is being reduced each month, the effective rate of yield is higher than that ordinarily charged on commercial loans and covers the special collection costs.

The advantage of this arrangement to the merchant is that he not only obtains frozen funds but also is given a free collection service on such accounts as the bank is willing to accept. The bank gets a profitable investment in personal loans, which it acquires at a minimum of promotional expense. It accepts only accounts of individuals who rate well upon investigation. The customer bears the added cost of a certain amount of interest but enjoys the advantages of easy installment payments and renewed credit standing.

Under this plan the merchant is invariably required to guarantee the account. If the customer fails to pay the bank, the uncollected balance is returned as an item to be collected by the merchant as he sees fit. To insure the bank further against loss, the full proceeds of the loans may not be paid over to the merchant, but a portion, possibly ranging up to 50 per cent, may be withheld as a "guarantee fund" and paid over only after collections have been made. Any uncollected balances will be covered by this amount. Since the customer pays interest on the full loan, this withholding may add considerably to the rate earned by the bank if it actually collects a much higher percentage than allowed for by the "plarantee fund." While this plan is not widespread, it is likely to find favor if banks continue to have difficulty in locating profitable channels in which to invest their funds.

Discounting bills and notes receivable. Owing to the fact that, in most lines of American business, credit extended to a company's own customers is not ordinarily evidenced by notes receivable, sometimes called bills receivable, the practice of discounting or of pledging such notes at commercial banks is not common as a method of securing funds. A few special groups, such as the lumber, jewelry, plumbers' supply, and agricultural-implement industries, take notes which are available for discount.[5] When the bank does lend on this type of security, the borrower's endorsement is added, making the paper two-name paper. Banks are not enthusiastic about this type of security outside of the few specialized fields in which notes are commonly used, because it is suspected that the notes offered represent accounts receivable which have been slow or overdue and then have been converted into notes.

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[5] C. A. Phillips, *Bank Credit* (New York: The Macmillan Company, 1920), p. 169. These notes receivable, held as an alternative to the more commonly used open account receivable, should be distinguished from the installment paper now so typical of certain industries.

Discounting trade acceptances. A special type of receivable is the trade acceptance. It is a draft, or bill of exchange, drawn upon a customer for merchandise and accepted at the time the sale is made. The instrument is accepted by the customer if he does not wish to pay cash but wishes to have the credit term, at the end of which time the draft matures. In order to distinguish such drafts, it has been recommended that they state on their face that they arise out of the purchase of goods, maturity being in conformity with the original terms of purchase. Such a statement would distinguish them from notes or drafts given for overdue accounts or for noncommercial transactions. When the seller, who draws the instrument, wishes to borrow, he endorses it and discounts it with the bank, becoming contingently liable if the acceptor fails to pay.

The trade acceptance has not been widely used by American businessmen since the Civil War in spite of the efforts of the Federal reserve authorities, the National Association of Credit Men, the American Trade Acceptance Council, and other groups to extend and make popular its use as an alternative to the open-account system. Much has been written on the advantages and disadvantages of the trade acceptance from the point of view of both the commercial banks and business.[6] The primary advantages to the banker in discounting trade acceptances rather than single-name paper are (1) that he is automatically protected from lending on anything but receivables, (2) that the acceptance owned by the bank is collected directly, so that the borrower is unable to divert cash receipts from his customers to nonliquid purposes, and (3) that in a practical sense, the bank becomes a secured lender, for, in addition to a first claim on the acceptance, it has a general contingent claim against the discounter if collection fails.

The more important advantages to the business which uses the trade acceptance instead of the open book account are as follows:

1. Since the trade acceptance represents liquid two-name paper, it should be readily discountable. Unless the bank insists on scrutinizing individual items, the business should be able to discount all of its acceptances. The burden of investment in receivables is reduced in this manner. The banker regards this paper as "self-liquidating"; that is, the buyer has received merchandise the natural sale of which would provide the means of payment. Such paper could logically be drawn by manufacturers or wholesalers but not by the retail merchant.

Discussions of the pros and cons are to be found in E. E. Lincoln, *Applied Business Finance,* Chapter XVII; Federal Reserve Bank of Richmond, *Trade Acceptances,* "Letters to College Classes," No. 11 (1923); W H. Kniffin, *The Business Man and His Bank* (New York: McGraw-Hill Book Co., 1930), Chapter XXIV.

2. The bank can discount from the individual business whatever amount of trade acceptances it deems wise, in contrast with the limitation upon single-name paper to a percentage of its capital stock and surplus. The reason for the difference is that the acceptances represent the separate obligations of the various customers, whereas the single-name paper is the obligation of the single maker. Should the acceptances not warrant a first-grade rating and depend somewhat upon the endorsement of the drawee, the bank would be likely to establish a limiting line of credit.
3. A business unable to obtain credit on its own standing might be able to discount the acceptances of those of its customers that were well rated.
4. Trade acceptances may enjoy a lower discount rate for some businesses than single-name paper.
5. Since a customer hesitates to refuse or to delay payment on an acceptance presented for collection at his own bank, acceptances are likely to be collected more promptly and more certainly than open book accounts.
6. Since an acceptance is a signed acknowledgment of the amount of indebtedness, collection is simpler than for an open account when legal action is necessary.

The more important disadvantages of the trade acceptance are the following:

1. Undoubtedly the chief difficulty is in getting the customer to adopt the practice. He is likely to prefer the less exacting liability of the open account, which permits him to run past the due date without incurring any severe penalty and the greater ease in making adjustments due to returns, spoilage, and other causes for allowance. If too great pressure is placed upon the customer to give an acceptance, his trade may be lost to competitors.
2. For the business with an adequate line of credit, it may be simpler to offer its own single-name note, or a few notes, than to discount batches of acceptances. The bank may also prefer the simplicity of single-name paper.
3. It has been argued that, should the acceptance become popular, it might do away with the cash discount and its advantages. However, the customer may be offered the alternatives of a discount for cash or the acceptance of the time draft if he wishes a credit term.

These disadvantages, plus the attempts of some businessmen to give their banks as trade acceptances notes received on past-due accounts and other unsuitable paper, have prevented any large expansion in the use of the instrument in spite of its apparent advantages. The management must also remember that in dis-

counting trade acceptances it is disposing of the company's most liquid asset outside of the cash itself. Until the discounted paper has matured and been paid, the contingent liability should be kept account of and regarded as so much current credit in use. Although this contingent obligation is ordinarily reflected in a footnote to the balance sheet, many creditors analyzing that statement reinstate the discounted notes among the receivables (contingent asset) and the contingent liability among the current debt items in order to make the situation comparable to that of a borrower who uses his own single-name promissory note and does not disturb the receivables.

Bankers' acceptances. Greater progress has attended the growth of the use of the banker's acceptance than that of the trade acceptance, especially in foreign trade transactions. A banker's acceptance is a draft by a seller of merchandise on the customer's bank instead of on the customer, and it commands a better market than the trade acceptance because of the greater financial strength of the bank. The use of the banker's acceptance in financing a transaction may be briefly described as follows: The buyer of goods enters into an agreement with his bank whereby the bank agrees to accept bills drawn on it by the seller up to a certain stated total, covering the specified merchandising operations. A commercial letter of credit is ordinarily issued by the bank to the customer, who sends it to the seller to assure him that his draft will be accepted. The buyer, in turn, makes an agreement with his bank to turn funds over to it a few days in advance of the maturity of the acceptance. If the transaction works out smoothly, the bank has earned a commission solely for putting its credit up in place of that of its customer and without tying up any of its own funds.

The seller ships the merchandise and through a bank or other agent presents the draft to the buyer's bank for acceptance. A bill of lading giving title to the merchandise is ordinarily attached to the draft. The accepting bank, with the bill of lading in its possession, may deliver the goods to the buyer in whole or in part, either without security or under a trust receipt which retains title in the bank, depending on the strength of the buyer's credit. The seller then has a bill drawn on and accepted by a bank. This bill may be discounted at a very low interest rate at the seller's bank or in the open acceptance market. The market consists of commercial banks and the Federal reserve banks and may be approached directly or through acceptance dealers. With the letter of credit to assure acceptance, the instrument may be realized on even before acceptance. This advantage is particularly important in foreign trade, where time is required to present the draft and return it to the domestic market.

From the point of view of both the seller and the buyer, the use

of the banker's acceptance involves the use of bank credit, although the actual source of cash is the buyer of the bill rather than the accepting _bank. The seller has realized cash on his receivables to the amount of the discounted face value of the bill. The buyer may obtain immediate possession of the merchandise by depositing cash or collateral with the accepting bank to cover the transaction, or the goods may be warehoused and released against cash payments as reqiiired.

The main advantage of the banker's acceptance as a method of financing a transaction and as a source of cash when it is sold lies in the fact that the acceptance usually arises from a self-liquidating transaction, which, coupled with a bank's promise to pay, gives it a wide market and a low discount rate. Other advantages lie in the shifting of the credit investigation and collection problems to the shoulders of the accepting bank. This advantage is especially important in foreign trade and explains the value of foreign branches of domestic banks to create credit for export business. The Federal reserve banks, which buy large quantities of bankers' acceptances, purchase them at a rate uniformly below their rate on paper rediscounted for member banks. The rates paid by dealers for prime bankers' acceptances approximate those at which the reserve banks buy bills for their own accounts. In addition, the dealer charges a small commission, which adds slightly to the cost of financing but is offset by the fact that the rate itself is very low and the customer is not usually required to maintain a compensating balance.

The estimated volume of bankers' acceptances outstanding in the United States rose steadily after they became eligible for purchase and acceptance by national and reserve banks under the Federal Reserve Act of 1913. By the end of 1929, approximately 1i billion dollars was outstanding. This amount declined to 270 million dollars by the end of 1938.[7] For the average business, the banker's acceptance is not an important type of instrument. Its use is confined to a great extent to large domestic warehouse transactions and to foreign trade transactions, in which it is the predominant method of financing purchase and sale. The market for acceptances consists of accepting institutions (big banks located mainly in New York), bill brokers and dealers, and bill buyers (mainly the Federal reserve banks).

Commodity loans. Loans secured by claims to commodities have come to be an important source of current funds, especially for those concerns involved in the storage, processing, and shipment of staples. A staple, as the term is used here, is a standardized, nonperishable commodity enjoying a wide market. "Commodity" or "merchandise" loans are ordinarily secured by one or more of three

[7] *Federal Reserve Bulletin* (monthly).

kinds of documents: (1) bills of lading, (2) warehouse receipts, and (3) trust receipts. As the product moves from the area of production to the consumer, the various parties or businesses concerned in the production and processing are financed by a series of loans secured by these documents. Such advances are made against coffee, cotton, copper, lead, butter, eggs, rubber, silk, corn, tobacco, wheat, and other staple commodities, as well as wholesale groceries.

A bill of lading is a document issued by a common carrier to a shipper to serve as a receipt for the goods, a contract to deliver them, and documentary evidence of title. The "straight" bill of lading, which is the more generally used, gives title to the consignee, is not negotiable, and is thus not good collateral for a loan. An "order" bill of lading, however, is negotiable and conveys title to the shipper, so that he can endorse it to a bank, which can obtain delivery of the goods by surrendering it to the carrier at the destination of the goods. Or the bank can turn it over to the buyer upon payment for the goods or in exchange for some other instrument giving the bank title to the goods. It is thus good collateral for bank loans, provided that the merchandise is not perishable or subject to much price decline.[8]

The bill of lading is used as security for bills of exchange, otherwise known as *drafts.* The seller draws the bill on the purchaser or on his bank, attaches a bill of lading from the carrier, and deposits for collection or discounts the bill at his bank. The bank sends the draft to its correspondent bank for collection, if it is a demand draft, or acceptance, if it is a time draft. In the former case, the buyer must meet the payment in order to obtain the goods; in the latter case, the buyer may obtain the bill of lading and arrange for payment before the maturity of the draft, gaining possession of the goods under a trust receipt or substituting a warehouse receipt for the bill of lading when the goods are stored. A trust receipt makes the holder of the merchandise a mere trustee for the bank, with no title of his own. When any such merchandise is sold, the holder must obtain a release from the bank and account for the proceeds to it up to the amount of his debt.

Warehouse receipts are used as security for bank loans and acceptance credits, chiefly in connection with commodities which are stored. The receipt is an acknowledgment of the receipt of goods for storage by a warehouse, which will deliver the goods on demand if the terms of the receipt are complied with.[9] Non-

[8] A majority of the states have adopted the Uniform Bill of Lading Act, which is designed to prevent fraud and effect standardization of terms. The Federal Bill of Lading Act, which became effective in 1917, relates to interstate and foreign shipments.

[9] Field warehousing has been developed by some warehousing concerns to bring their service to the place of business of the merchant. They take con-

negotiable receipts provide that the merchandise is to be delivered only to the persons specifically named in the receipt, but negotiable receipts permit delivery to bearer or to a specified person or his order. The latter can thus be used as collateral for bank loans and for acceptances.

The advantage of loans secured by bills of lading and warehouse receipts (as well as elevator receipts, cotton tickets, compress receipts, and similar documents) is that the processor or merchant does not have his funds tied up in merchandise during the period pending its conversion or sale save for a small part of its value. On the other hand, certain risks are assumed by the lender, including the chances of shrinkage in value of the goods by an amount greater than the original margin of the loan, the reliance placed on the warehouse, and the lack of uniformity in grading products. The lender can reduce his risk by a careful selection of borrowers and by lending only a part of the value of the commodity. Thus, a margin of 20 per cent or more may be required, the proportion depending on the commodity and the character of its market.

Loans secured by chattel mortgages on specific merchandise may also be used to obtain bank funds, but they are rarely employed by commercial firms because of the difficulties of pledging and releasing merchandise that is being constantly turned over. They are used mainly for acquiring equipment and in agricultural finance.

Bank loans secured by stock market collateral. Although loans against stock and bond collateral occupy a very important place among bank assets, their use for direct business purposes is negligible. Banks make security loans mainly to investment bankers and dealers in securities, to individuals for purposes of purchasing or carrying securities, and to brokers. Loans to businessmen and firms for current purposes may be secured by stocks and bonds as a substitute for good general credit. Such loans may result in lower rates on borrowed capital, but, generally speaking, the sound business either borrows on its own general credit or liquidates its temporary investments in the market, if it has built up this type of current asset.

There may be occasions when the borrowing company finds it more convenient to borrow than to liquidate investments. It may

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trol of space in the merchant's quarters and so eliminate the expense of transferring inventory to a public warehouse and renting such special housing. The practice also has the advantages of placing the goods under the control of an independent warehouseman, who should be financially responsible, and of creating an instrument that meets the legal requirements of a *bona fide* warehouse receipt—not to be confused with the chattel mortgage or the trust receipt. All except four states (Georgia, Kentucky, New Hampshire, and South Carolina) have adopted the Uniform Warehouse Receipts Act, which regulates their use. Standard terms and conditions have been established by the United States Department of Commerce.

not wish to sell its temporary investments at a loss or may wish to continue to hold them during a rising market. Or they may represent an interest in affiliated businesses which it is useful to retain. Under these circumstances a collateral loan may be an appropriate source of cash.

Term loans. A recent development in commercial banking has been the rise of the "term loan"—that is, a business loan running for a period of years with a provision for full repayment during the life of the loan. It is discussed here in connection with other bank borrowing although it is a type of intermediate credit rather than a short-term loan such as those covered in the remainder of the chapter or the long-term type of debt with which much of this book is concerned. The importance of this type of loan is indicated by a recent Federal reserve study showing that 25 per cent of all commercial, industrial, and agricultural loans of 400 reporting member banks were in this classification. The proportion in New York City ran to 39 per cent.n

The risk to the bank in loans which cannot be realized upon within a short time was made most apparent during the acute banking troubles of 1930-1933. However, after 1934 the banks found themselves with unusual sums of idle money and a scarcity of borrowing customers. The term loan grew out of this situation, the bankers relying upon the new deposit insurance protection to ward off future large-scale bank runs that would make heavy liquidation of loans necessary. The feeling that a reasonable proportion of their funds might be nonliquid if they were sufficiently sound was furthered by a change in the attitude of bank examiners, who began to place more emphasis on the prospects of repayment and to avoid criticizing loans solely because they were slow or of long duration.[11] The term loan, with its provision for deposits and systematic amortization, is undoubtedly sounder for both the bank and the borrowing business than the nominally short maturity loan which many banks formerly used but which was renewed indefinitely and amounted to a semipermanent accommodation.

It is too early to describe common practice for this type of loan. The individual business will have to learn by negotiation with its bankers what will be permitted. On the basis of common sense and some current practice, the management may expect something along the following lines:

1. Maturity. The banker will favor loans running not over five years. When the borrower is in a very strong position, and par-

"Federal Reserve Bulletin, July, 1939, pp. 560-561.

"Institute of International Finance of New York University, *Term Loans by Commercial Banks* (Chicago: Association of Reserve City Bankers, 1939). This 40-page pamphlet discusses the subject from the point of view of the bank.

ticularly if he is able to resort to the bond market for the funds, he will be able to command a longer amortization period. Table 33 represents a hypothetical case covering a six-year period and shows how substantial a debt can be liquidated out of earnings alone in a limited time. Assume (a) that the loan amounts to one half of the assets (more would hardly be likely) ; (b) that the interest rate paid is 5 per cent, and the business earns 10 per cent on its total investment (since a business able to obtain such a maximum credit should be able to earn twice the rate charged for bank credit) ; and (c) that all earnings are to be devoted to interest and debt retirement. Any small or medium-sized industrial corporation obtaining so much credit might well be expected to abstain from dividends until it is in a stronger credit position.

TABLE 33

DEBT RETIREMENT PER $1,000 OF LOAN WITH ANNUAL NET INCOME BEFORE INTEREST OF $200 (10% ON $2,000)

Year	*Loan at Beginning of Year*	*Earnings Before Interest*	*Interest at 5 Per Cent*	*Balance Applied on Loan*	*Loan at End of Year*
1	$1,000.00	$200	$50.00	$150.00	$850.00
2	850.00	200	42.50	157.50	692.50
3	692.50	200	34.63	165.37	527.13
4	527.13	200	26.36	173.64	353.49
5	353.49	200	17.67	182.33	171.16
6	171.16	200	8.56	171.16	0.00

This illustration ignores funds that might be available from amounts earned for depreciation and not required for replacements during the period of amortization. It is also likely that a more conservative proportion of debt would permit some dividend distributions instead of the full retention assumed.

2. Type of business. The business that is engaged in a stable line and is thus little affected by cyclical variations will find it easiest to obtain the term loan. In general, lines like food and merchandising would be favored; those like construction would be avoided. Concerns that are subject to style changes, to the hazard of technological changes, or to similar uncertainties will also find long credits hard to obtain.

3. Size of business. In general, the larger the business and the more varied the personnel, so that its success does not hinge too largely upon the life of a single individual, the easier it will be to obtain term loans.

4. Security. Like other bank loans to business, term loans are likely to be unsecured. If a term loan is used to purchase specific equipment, a lien on that asset may be given and an attempt may

be made to arrange the amortization so that the recovery value of the asset shall be in excess of the loan balance. Where the real estate owned is of the general utility type, it may be mortgaged. Life insurance companies have come into the market for amortized mortgage loans of this last type.

5. *Protective provisions.* Because the loan contract runs for more than a year and is so often unsecured, the bank will find it logical to provide against acts that might weaken its position. These provisions would cover such points as are not uncommon for industrial debentures: the maintenance of working capital against weakening dividends or diversion to fixed assets, restrictions upon subsequent debt and the giving of liens, and the maintenance of certain ratios. The loan agreement for smaller concerns, especially when their stock is closely held, might well go further and restrict salaries and bonuses to officers and forbid merger or consolidation without the consent of the lender.[12]

6. *Balance sheet position and earnings.* Probably somewhat the same standards will appear for term loans as for industrial bond issues. Generally we should expect that the total would not exceed the working capital and that the earnings would be not less than three or four times the initial interest charges. In view of the current low interest rates, it would be safer to say that the earnings should run at least 20 to 25 per cent of the face of the initial debt.

Such generalizations as the foregoing must be regarded as tentative. Standards vary from bank to bank and for different kinds of borrowers. Consultation with the particular institution involved will clarify the local possibilities.

Because of their longer maturity, term loans should be assumed by a business with caution and an eye to their possible effect on other credit channels that may be needed. The effect of the burden of interest and principal payments during a possible depression period must also be weighed. In case of trouble, however, the concentration of debt may well make negotiation of an adjustment easier. The larger corporation may also find the term loan economical as compared with a bond issue because of the absence of registration requirements.'[13] In a period of low interest rates, the shorter maturities may also cost less than a medium- or long-term bond issue. The small corporation that is able to obtain a term loan may find the cost distinctly lower than some of the specialized credit sources described in the next chapter.

Ibid., pp. 37-38.

" In some cases, a rather large loan has been divided by the local bank with its large metropolitan correspondent, the latter taking the shorter maturities. Since the earlier maturities are in the near future, and so are more predictable, they might be regarded as somewhat safer, even though they would have the same security.

CHAPTER 20

SHORT-TERM FINANCING *(Continued)*: TRADE CREDITORS, COMMERCIAL PAPER HOUSES, AND SPECIAL FINANCIAL INSTITUTIONS

Trade Credit

Mercantile credit. Trade or mercantile credit is the credit granted by manufacturers, wholesalers, jobbers, and other business units as sellers of goods to the buyers of the goods, excluding the credit of the retailer to the consumer.[1] As a source of current funds, it plays a very important role in the financing of many business corporations, especially those that do not have ready access to other types of credit. Although the manufacturer probably depends less on credit for his sources of supplies than does the wholesaler, the jobber, and the retailer who follow him in the distribution process, the granting of mercantile credit at every successive stage from manufacture to consumption has become a typical feature of our modern business system. While bank credit, in its various forms, is relied upon in a large way to help carry the burden of financing the successive stages from production to consumption, credit granted by the seller to the buyer of materials and merchandise is probably of equal, if not of greater, importance.

While both bank and trade creditor supply current funds to business, their positions differ and should be appreciated by the user:

1. The bank is solely a lender and depends upon interest for income; the trade creditor is primarily a vendor of goods or services, so that for him the extension of credit is an aid to selling, and he enjoys a more substantial profit margin. Because of this point of view a merchant may extend credits where some losses are likely if

[1] Since we are interested in credit as a means of financing business operations, our discussion is limited to the credit *obtained* by the corporation from those who supply materials and goods to it. The following references are suggested for those who may be interested in trade credit from the point of view of those *granting* the credit: T. N. Beckman, *Credits and Collections in Theory and Practice* (New York: McGraw-Hill Book Co., 4th ed., 1939); A. F. Chapin, *Credit and Collection Principles and Practice* (New York: McGraw-Hill Book Co. 2nd ed., 1935); R. P. Ettinger and D. E. Golieb, *Credits and Collections* (New York: Prentice-Hall, Inc., rev. ed., 1938); W. H. Steiner, *Mercantile Credit* (New York: Longmans, Green & Co., 1936).

he feels that such risks taken as a group will yield a satisfactory net return over the direct production and selling costs plus the loss on bad debts.

2. A further reason for the less exacting credit standards of the mercantile credit grantor is that he contemplates not only the profits on the immediate transaction but the income from the repeat sales which are likely to occur, especially if the customer is bound to him by favorable credit relations. While the wise banker appreciates a profitable borrowing customer, he has not been willing to assume present risks in order to purchase future lending business.

3. The source of the funds used by the commercial banker also influences his attitude. Since he is lending for the most part funds derived from deposits, the urge to restrict himself to high-grade, short-term loans that can be liquidated to meet withdrawals is always present. The trade creditor regards his funds as permanently available, even when they are drawn from short-term sources, and is willing to make his credit extension fairly permanent and continuous if it means the maintenance of a profitable relationship.

4. Banks, on the average, have a closer contact with their debtors and have more detailed and accurate information about them than do mercantile credit grantors. This difference is explained by the bank's need for more rigorous credit standards, by its firsthand contact with its borrowers, who are mostly in the same community, as compared with the scattered customers of other than retail merchants, and probably by a larger average credit, which justifies a somewhat larger expenditure on each credit investigation. The mercantile credit grantor does have the advantage, as a rule, of dealing with only a single type of business, whereas the bank extends credit to all kinds of business, making its problem of analysis more complex.

Analysis of the trade debtor's credit standing. Like the commercial banker, the trade creditor subjects the business to an investigation of its credit worth before fixing the amount and terms of credit which will be allowed to it. The sources of credit information which were noted in the preceding chapter as available to the bank are similarly available to the trade creditor. However, trade creditors generally make much greater use of the mercantile agencies, trade groups, and credit interchange bureaus than do the commercial banks and place less emphasis on financial statements ob tained directly from the buyer. The result is somewhat greater emphasis upon the credit applicants' debt-paying habits in the initial credit granting and upon his record with the particular creditor thereafter. The mercantile agencies and credit bureaus exist primarily for the benefit of the trade creditors, who must have information available on a large number of actual and potential credit

customers. Since the bank handles local risks and has access to more detailed financial information, it relies more on its own data than on credit material supplied by others. The commoner sources of trade credit information, and the character of data they furnish, may be outlined as follows:

1. Direct or internal sources:
    a. Personal interviews by salesmen, and sometimes by credit men.
    b. Correspondence with credit department.
    c. Past record, if any, with the concern.
2. Indirect or external sources:
    a. Mercantile agencies, general and special.
    b. Other trade creditors, approached directly or, more generally, through credit interchange bureaus.
    c. Commercial banks.
    d. Attorneys.
    e. Public records.
    f. Corporation investment manuals.
    g. Newspapers and trade papers.

From the direct sources and the mercantile agencies may be obtained financial statements, the background and experience of the owners, insurance carried, sources of supply, products handled, territory served, and methods of operation. Personal interviews at the place of business have the advantage of disclosing the layout, the impression made on the public, the adequacy and freshness of the stock, and often the sources of supply. The past record of the concern with other trade creditors discloses the way in which the credit applicant has paid his bills in the past and the amount and terms of credit extended. The bank may supply information as to general credit repute, customary cash balances, and any credit which it may have extended. Local attorneys and the public records are useful in revealing any judgments or liens against the business. Corporation investment manuals and information services are chiefly useful in providing financial statement information for larger corporations. They also record current financial developments (which may also be gleaned from newspapers and trade papers) that are likely to affect credit standing.

The analysis of financial statements made by the seller's credit department will follow the general line of procedure described briefly in the preceding chapter for the bank credit department. One special check sometimes used by mercantile credit men is to compare the accounts payable with the average monthly cost of goods sold to discover how many months' purchases are unpaid for. If the business has fairly steady purchases throughout the year and

the maximum credit term is 30 days, it is clear that the presence of more than one month's bills outstanding would be indicative of slow pay.

Upon the basis of the information derived from the various sources and of the analysis of the buyer's statements, the seller calculates whether or not he is willing to grant any credit and, if so, for how much and on what terms. Unlike the usual banker, he is ordinarily only one of a number of creditors and so is unable to exercise any influence in setting a limit to the total credit line of the customer.

Factors affecting the use of trade credit. The use of trade credit will depend upon the buyer's need for it and the willingness of the sources of supply to extend it. The buyer needs trade credit if his working capital is insufficient to care for his current requirements and he cannot obtain bank credit or other short-term credit that costs less than trade credit. His need is also influenced by the seasonality of his business; if it fluctuates measurably, he is likely to feel it more reasonable to carry any purely seasonal requirements by the use of temporary credits rather than keep a permanent investment in the business for that purpose.

The willingness of the trade creditor to extend credit depends partly on individual factors and partly on external trade and competitive conditions. These may be outlined as follows:

A. Individual factors.

1. The seller's financial position. This factor serves to limit the amount of credit he can extend. He will tend to grant easier and longer terms if his own funds and command of credit are ample in relation to the volume of business he can achieve.

2. The seller's anxiety to dispose of merchandise. If a vendor is particularly anxious to dispose of inventory because it is excessive or the price outlook is gloomy, he may offer not only price concessions but also easy credit terms in order to induce sales. When an old product is being introduced into a new territory, or when a new product or new brand of goods is being offered on the market for the first time, easy credit terms may be one of the devices for stimulating sales. Indeed, it is in the case of entirely new products that we sometimes find consignment sales; that is, the goods are left for sale at the risk of the manufacturer or wholesaler, and remittance is made only as the goods are sold. In such a case the goods do not belong to the person offering them for sale, and no receivable exists until their sale is consummated.

3. The seller's estimate of credit risk. The extension of credit is determined not solely by objective standards but is also a matter of opinion and the personal standards of those passing on the credits for the seller.

B. Trade or competitive factors.

1. The length of the customers' marketing period. Since the purpose of trade credit is to help the customer carry his inventory, the length of the credit term depends on the length of the turnover period in the particular line of trade. A retail butcher or bakery shop would expect a short credit period; a hardware or jewelry concern would expect a long credit term.

2. The nature of the article sold. The more staple and generally salable the article offered, the more likely are credits to be generous; the more novel the article and the more sales ability required in its resale, the more likely are credits to be extended on a niggardly basis. Exceptions to the latter point of this rule will generally be new products under heavy sales pressure (cases under A, 2).

3. Competitive conditions. In a broad sense, the characteristic credit terms of a given trade, as set by the foregoing factors, are imposed upon those engaged in it by the force of competition. But, in the sense that it is a separate factor, severe competition may tend to cause credit terms to be made easy, while lessened competition will tend to make them stricter.

4. Location of customers. Customers located at a distance from the central market are usually obliged to stock for longer periods than those near the market, and therefore they may be granted longer credit periods. This effect of heavier stocking is most evident when transportation is poor or uncertain.[2]

5. The business cycle. By affecting the trade's attitude toward risk, the business cycle alters credit extensions. When conditions are prosperous, the tendency is to minimize the risk of credits extended to borderline customers, with the result that more and longer credits can often be obtained. When depression reverses the outlook, the opposite condition is general.

Terms and cost of trade credit. If the decision is to extend no credit, the logical terms are cash before delivery (C.B.D. terms). More usual are cash on delivery (C. 0. D.) terms, which, however, involve the risk to the seller of losing the costs of transportation and possible delay in the return of his merchandise if the buyer is unwilling or unable to pay upon the arrival of the merchandise.

[2] Herein lies the primary importance of more ample credits for foreign trade. In countries where credit is costly, trade credit is sometimes used overtime. Crow explains how a Chinese wholesaler in cigarettes makes his fortune by getting a 90-day credit from the manufacturer, selling promptly, at cost if necessary, and granting only 30 days' or no credit to his retailers. In this manner he has the use of two months' sales to set up as a money lender. This author also tells how a dealer may even sell imported fruit for less than cost in order to have the proceeds to finance a cash trade in domestic fruit during the credit period granted by the importer. Carl Crow, *Four Hundred Million Customers* (New York: Harper & Bros., 1937), pp. 50-52.

When the seller offers a 30- or 60-day credit term, he is also likely to offer a discount for cash. This cash discount is ordinarily allowed if payment is made within some short period, such as five or ten days. This time will cover the shipping period and give the buyer an opportunity to check the merchandise before making his remittance. Such terms as the foregoing might be expressed as "2/10, n/30," which means that the buyer may either deduct 2 per cent if he makes payment within ten days after the date of the invoice or pay the net amount shown on the invoice at the end of the 30-day credit period.

The cost of trade credit is measured by the cash discount. Under the terms just stated, the buyer is paying 2 per cent for an extra 20 days of credit if he fails to discount his bill and takes the full term allowed. If the terms were 2/10, n/60, the cost would be 2 per cent for 50 days. But 2 per cent for 20 days is at the rate of 36 per cent for 360 days, and 2 per cent for 50 days is at the annual rate of 14.4 per cent.

In general, computation will show that neglected cash discounts amount to a high annual rate of interest. The reason for this high rate is that it represents a charge not only for the use of money but also for credit losses and other expenses that go with other than a cash business. If a merchant were to construct a logical cash discount, rather than accept that set by the competitive customs of the trade, he would add together the following:

1. Interest cost of the credit term. This cost should be figured not for the nominal difference between the cash discount period and the net term stated in the invoice, as was done above, but for the difference between the actual period taken by those who take the credit period and that taken by those who discount. Some customers, regardless of the effect upon their credit standing, will be slow and fail to pay at the end of the stipulated period.
2. Bad-debt loss. Since cash customers and those who discount do not contribute to this loss, it should be computed as a percentage of those credit sales which use the credit term.
3. Collection expenses and a portion of the credit department expenses. Collection costs are also a feature of credit granting. Such extra credit department costs as could be reduced if these credit customers, as distinguished from those that discount, were eliminated should also be treated as a part of the total figure for the cost of credit granting.

When the situation is analyzed, the debtor will find that bank credit is ordinarily cheaper than trade credit. If a business is unable to command bank credit or some other credit that is less expensive, it may feel justified in using trade credit either in the

light of extra profits which it can make by its use, or as the price of continuing in business at all, or in comparison with the lower but continuous cost of permanent funds, which might be idle for a part of the year in a seasonal trade. Trade credit is most heavily used by smaller business units that do not have ready access to bank funds or the security market.

Commercial Paper Houses

Nature of commercial paper. As an alternative to negotiating direct bank loans, the concern that can meet a sufficiently high credit standard and has a sufficiently large need for short-term funds may arrange for the sale of its single-name paper to banks through the commercial paper house.[3] Such open-market commercial paper is spoken of as "purchased commercial paper" to distinguish it from the similar loans which the bank makes over its own counters to its depositors. By this avenue the corporation reaches banks other than its own and finds it possible to obtain larger accommodation without any negotiations with the individual banks.

Commercial paper is sold in pieces of round denominations, such as $2,500, $5,000, and $10,000, with maturities most often running four to six months, although somewhat shorter and longer maturities are possible. The notes are made payable to order of the issuer and then endorsed in blank to make them negotiable. They do not bear interest but are sold at a discount from face value. In a few exceptional cases, such as the jewelry and wholesale lumber trades, the notes or acceptances of customers may be offered as double-name paper instead of the customary single-name paper just described.

Operation of the commercial paper house. The present commercial paper house or dealer is the successor to the early note broker, who rose to importance between 1840 and 1860 as a buyer of paper on consignment. After the Civil War the commercial paper dealer, buying for his own account like the investment banker, succeeded the broker. He purchases the paper from the issuing firm at the going rate of discount, which depends on the quality of the paper and the maturity date, to which a "commission" is added. Whatever portion of the discount accrues while the paper is unsold is earned by the dealer. If the paper is not resold to a bank immediately, the market rates of discount may change, and the broker

[3] The work of the commercial paper house is described at greater length in books on banking and credit, and in R. A. Foulke, *The Commercial Paper Market* (New York: Bankers Publishing Co., 1931); W. H. Kniffin, Jr., *Commercial Paper* (New York: Bankers Publishing Co., 1918); Albert 0. Greef, *The Commercial Paper House in the United States* (Cambridge: Harvard University Press, 1938).

will make a profit from a falling market rate or take a loss from a rising rate. Ordinarily, his main compensation is not his share of the discount, however, but consists of the flat "commission," usually one fourth of one per cent of the face value of the paper, charged the maker. (Strictly speaking, a commission is a percentage paid to a broker for services. In this case, it is the gross profit margin of a dealer.)

The commercial paper house, usually organized as a partnership, operates on a combination of owned and borrowed capital. Owned capital must be large enough to provide the margin for the amounts which have to be borrowed from banks. The usual procedure is to borrow from banks, using any unsold notes as collateral for the loan. The business is concentrated in the hands of a small number of firms, which maintain branches and sales forces that keep constantly in touch with their bank customers. Since the dealers do not guarantee or endorse the paper they sell, its salability depends on the credit worth of the maker, whose credit standing is checked by both dealer and bank.

Types of businesses using commercial paper. Corporations which are able to sell their unsecured promissory notes in the open market must necessarily belong in the highest credit group. Their qualifications include (1) a record of successful operation for a number of years, as shown by income statements; (2) a reputation for prompt payment of obligations; (3) a healthy current financial condition, as revealed by balance sheets; and (4) production or distribution of standard commodities, as opposed to speciality and style goods. Among the largest users are the textile and other dry-goods lines and foodstuffs. Other lines are metal goods and hardware, farm implements, furniture, lumber, drugs and chemicals, and steel. Finance companies are exceptional noncommodity businesses offering commercial paper.

The concerns selling paper are of medium and large size. A study of active users of this credit channel in 1923 and 1925 showed but few with a net worth under $250,000. More than one half were between $500,000 and $2,500,000. Somewhat over 20 per cent were below and a similar per cent were above this class. The average open-market borrower in 1925 was worth approximately $1,250,000 and borrowed approximately $784,000.[4] The smaller concerns find it easier to obtain credit in sufficient amounts from their own banks. Very large corporations find it easy to obtain ample funds on a permanent basis.

Advantages and disadvantages of open-market borrowing. The more important advantages enjoyed by concerns which are

[4] Foulke, *op. cit.,* pp. 51-52.

able to sell their commercial paper in the open market are as follows :

1. The rate of discount is generally lower, even when the "commission" is included, than the rate charged by banks lending directly to their customers over their own counters, although in the larger centers there is some tendency for competition between the commercial paper house and the bank to bring the rates together.
2. Maintaining deposit balances at one or more banks for the purpose of obtaining credit is made unnecessary. However, since the borrower may feel it wise to maintain a line of retreat, he is likely to continue keeping considerable balances to maintain credit lines in case the open market becomes difficult to use.
3. The borrower's credit facilities are widened. Sale of commercial paper in the open market overcomes the legal limitations on loans to one customer which may prevent the local bank or banks from caring for the concern's credit needs.
4. The borrower's prestige is increased by the advertising value of paper which becomes widely known and respected. This financial prestige might be particularly useful in the event of a later sale of a security issue.
5. Credit standing at home is strengthened by the fact that the borrower's paper stands up under all the tests of open-market sale.

Offsetting these advantages of borrowing by the sale of commercial paper are at least two disadvantages which should be noted:

1. The inconvenience of numerous inquiries and investigations from all of those interested in purchasing the paper.
2. The reliance on an impersonal source of credit—buyers with whom the borrower has no direct relations. These parties have no feeling of responsibility like that of a local bank wishing to maintain a profitable relationship. Maturing paper must be paid; renewal cannot be sought. As a result, in times of tight money in a crisis, it may be extremely difficult, if not impossible, to sell paper. For this reason, careful borrowers will keep bank credit lines open by using them occasionally or using them alternately with the open market, whichever course seems the more likely to insure bank credit in times of emergency.

Volume of open-market commercial paper. Some idea of the relative importance of commercial paper financing done in this way may be had from Table 34.

The fairly steady decline during the 1920's can be attributed in part to the tendency of the larger corporations to sell stocks and bonds after the lessons of the post-War inflation, which proved disastrous to many users of short-term credit. Other reasons for the decline were the high rates on commercial paper to 1929 and

the decline of such industries as textiles and leather, which had been important users of the open market.[1] The increasing size of banks also made it possible for more concerns to obtain sufficient credit through direct bank loans. Since **1930,** the general decline in the use of bank and open-market paper has continued as a result of the depression influence, although recent years have shown some increase.

The outlook for open-market paper as an important source of current funds is at present obscure. Anything which favored the growth of medium-sized corporations, particularly outside of the large metropolitan centers, where big banks are common, would stimulate its growth. On the other hand, a further concentration of industry in the hands of very large corporations or the expansion of branch banking would act as a negative influence.

TABLE 34

COMMERCIAL PAPER OUTSTANDING AT END OF YEAR *
(in millions)

1920	$950 (est.)	1930	$358
1921	675 (est.)	1931	118
1922	722	1932	81
1923	763	1933	109
1924	798	1934	166
1925	621	1935	172
1926	526	1936	215
1927	555	1937	279
1928	383	1938	187
1929	334		

* As reported by dealers to the Federal Reserve Bank of New York.
Source: *Federal Reserve Bulletin.*

Receivable Loans

Loans from commercial credit companies. Two other types of current financing that are usually performed by specialized institutions are (1) making loans secured by accounts receivable and (2) lending upon or buying installment paper. Sometimes these operations are performed by a single concern. Probably the most general term covering the whole group is *finance company.* Such companies are also known as *discount, receivables, commercial credit, installment finance,* and *automobile finance companies.* We shall deal first with those confining themselves largely to lending on accounts receivable, which are most aptly called *commercial credit companies,* and then go on to consider those engaged principally in the buying of installment paper. A short account of the role of the

[1] For a discussion of the major factors in the decrease in the supply of commercial paper in the 1920's, see Boyce F. Martin, "Recent Movements in the Commercial Paper Market," *Harvard Business Review,* April, 1931, p. 360.

factor in providing current funds is included, since he is often considered in the general "finance company" group and bears a family resemblance to the commercial credit company.

In the previous chapter it was explained that banks are usually reluctant to advance funds when it is necessary to take as security the borrower's own book accounts, which are so much more common than notes and trade acceptances. If it is necessary to raise cash on the strength of these accounts, and unsecured bank loans are not available, the accounts may be assigned to a commercial credit company to obtain funds. Those who use this source of credit are likely to have a considerable proportion of their funds tied up in accounts receivable and to be unable to obtain much needed credit from their bank because they either have a precarious financial condition or are lacking in credit standing as a result of business youth or poor record. Or the borrower may use this resource because he can obtain more credit in this way than from a bank. The general procedure is for the borrower to enter a contract with the credit or finance company whereby the latter agrees to advance up to a certain amount on certain stipulated conditions, such as the right to reject receivables tendered. The contract also specifies the percentage to be advanced upon the assigned accounts (75 to 80 per cent), whether the debtors are to be notified of the assignment or pledge of their accounts, and the charges to be made.

The debtor customers of the borrowers may or may not be notified that the account has been assigned. Under the "nonnotification" plan, the debtor pays the borrowing mercantile house, which has agreed to collect as the agent of the credit company. The borrower forwards the remittances as they are received. Under the notification plan, which is usually preferred by the credit company, since it eliminates any reliance on the borrower, payments are made directly to the credit company, which obtains a power of attorney to endorse checks, drafts, and notes in the assignor's name. Since the advance is only a fraction of the total face of the receivables pledged, the credit company protects itself against bad-debt losses by retaining all collections until the loan is paid off. It should be remembered that under this arrangement the account is not sold to the finance company but merely pledged. The responsibility for collection and any losses incurred in that process lie with the borrower.

The advantage of the use of the commercial credit or finance company as a source of immediate cash is that funds obtained may permit an additional volume of operations that would not be possible otherwise. It may also permit the taking of cash discounts or the purchase of goods for cash where trade credit is not available. But several serious disadvantages also exist: (1) The best receivables are taken from the company's possession, so that it will be

difficult or impossible to obtain current credit elsewhere; (2) customers may object to paying their accounts to an outsider or be unfavorably influenced by the collection methods of the finance company under the notification plan; (3) the cost of the funds obtained from this source is high.

The charges run from 1 to 11 per cent per month on the face amount of the receivables assigned.[6] The cost of such credit is far higher than the rates on ordinary bank loans. The higher rate may, however, be partly counterbalanced by the fact that the borrower discounts his receivables only as he needs cash from day to day, so that he never borrows more than he needs and does not have to carry excess bank balances to maintain a line of credit. It should also be remembered that even high-cost credit may be less than the profits to be had from greater volume, from cash discounts realized, from bargains in merchandise that can be bought for cash, or from efficiencies to be realized from new equipment. However, the borrower may use this credit channel simply because no other possibility is available, and he must pay to survive.

The commercial credit company obtains much of its funds from banks and from the sale of its own paper through the commercial paper house. Thus it is largely bank credit, through the medium of the credit company, which is being used. With the easy security markets of recent years, there has been a strong tendency for the larger credit companies to obtain more of their funds from the sale of funded debt and preferred and common stock.

The present volume of financing by the pledging of receivables is not known, but it is apparent that the method is one for the small and medium-sized businesses that are weakly financed and find the use of this high-cost source of funds imperative. The reason for the high cost is the careful investigation and considerable supervision which the lender feels obliged to employ for his own protection in making advances to such borrowers.

Factoring

Sale of accounts to factors. The factor goes one step further than the receivables company, which lends upon pledged accounts, by purchasing them outright. (The two types of operation are now so similar that they may be conducted by the same finance company.) The practice appears to have originated in this country in the textile industry. The manufacturer's selling agents assumed the responsibility for accounts once the sale had been made. Such a commission house was generally the exclusive sales representative

[6] On an advance of 80 per cent of the face amount of an account receivable a rate of 1 per cent per month on the face amount results in an annual rate of 15 per cent on the amount of the loan.

of the mill and was in a much better position than the mill owners, especially in the earliest times, when the textiles were imported, to judge the credit risk being assumed. He was also located in a large trading center, where it was generally easier to obtain adequate banking accommodations than in a New England or Southern mill town. The result was a clear-cut division between the production and the merchandising functions.

In present-day factoring, however, the function performed is more generally only a financial one. Sales are made by the manufacturer. At the outset, the factor buys all of the client's accounts receivable that he deems good. After that, accounts are purchased as the sales are made. In addition to a deduction for the charges of the factor, a small percentage is withheld in case the customer should return goods or ask for allowances for faulty goods, spoilage, or errors in pricing. Once the account has been purchased by the factor, he has no recourse against the vendor of the account save for returns and allowances of this sort. He not only performs the banker function but also bears any credit losses and stands the costs of collection. Accounts are collected directly by the factor, as under the notification plan for lending on pledged receivables. Under the circumstances, it is clear that the factor will have to be allowed to approve all credits before shipment is made, unless the seller is willing to carry a certain number of accounts himself.

For the special functions performed the factor will make a charge of from 1 to 2 per cent of all accounts purchased. In exceptional cases, rates as low as $\frac{1}{4}$ per cent and as high as 4 per cent are charged, the percentage depending upon risk and probable costs of collection. In addition, interest (usually 6 per cent) is charged upon the advances made. Occasionally, the factor will make advances on inventory when a business is highly seasonal. Such credit expands the possible volume of sales and so the possible profits of the factor from receivable purchases.

Advantages and disadvantages of factoring. The possible advantages to the business concern in using the factor are as follows:

1. Just as in the case of any kind of short-term financing, an expansion of operations is made possible.
2. A known cost is substituted for the usually unpredictable credit losses.
3. Sales to large customers are made possible in cases where concentration of risk would make it inadvisable for the business to grant so large an amount of trade credit to one person.[7] The factor,

[7] Concerns not using a factor can obtain protection against this hazard by using credit insurance, which covers the insured against credit losses in excess of an agreed normal loss on annual sales or on individual accounts which have been guaranteed.

on the other hand, can regard the account as relatively small in relation to his larger volume of credit operations.

4. In contrast to a bank "credit line," there is no requirement or understanding that it will be "cleaned up" once during each year. The process of selling accounts can be a continuous one if the seller of the accounts so wishes.

5. Factoring may reduce or eliminate credit and collection, department expenses. If the business chooses not to rely solely upon the credit appraisals of the factor, it will need to provide for passing on such credits as it is willing to carry itself.

6. Factoring may improve the caliber of the credit-granting work. Since the small or medium-sized business may be handicapped in establishing a skillful credit department personnel because of the small volume of credits over which the expense may be spread, the larger operations of the factor may permit a better job in this direction.

7. Since the accounts are sold outright and there is no current liability to the factor, this method of current financing may enable the business to make a better showing and to achieve a higher credit rating than by the use of other credit channels. The process may be illustrated by the accompanying figures, which show the working capital position before and after the sale of receivables to a factor.

INITIAL CURRENT POSITION

Cash	$ 30,000	Bank loans	$100,000
Accounts receivable	200,000	Accounts payable	200,000
Inventory	270,000		
	$500,000		$300,000
Working capital	$200,000		

Current ratio, 1.67 to 1.

The initial figures show a condition which is likely to cause credit curtailment by the bank because of the low current ratio. This contraction would almost inevitably mean slow payment to trade creditors, if that is not already the case. If it is assumed that all of the receivables are sold, that the deductions for the factor's charges are ignored, and that the proceeds are then applied to current debt reduction, the following position would result:

CURRENT POSITION AFTER SALE OF RECEIVABLES

Cash	$ 30,000	Bank loans	$ 50,000
Inventory	270,000	Accounts payable	50,000
	$300,000		$100,000
Working capital	$200,000		

Current ratio, 3 to 1.

Of course, the bank may refuse to lend to the business after the removal of the more desirable receivables, in which case the business

would have to rely upon trade credit to finance inventory not cared for by regular working capital. Since the volume of accounts payable is relatively small, they could be paid more promptly from the flow of current funds. On the other hand, the bank may consent to continue its credit line as long as a somewhat higher ratio, as shown, prevails and it feels assured that the debtor will be able to clean up its bank debt once a year for a period of a few months. On the basis of the above figures, it might even be possible to borrow the full $100,000 from the bank in order to pay off trade accounts if cash discounts made that course attractive. Wherever possible, the business would prefer to use bank credit, with its lower cost, rather than to sell its accounts at a substantial discount, unless there were the special factor of wishing to avoid risk due to having a considerable sum tied up in a few large accounts receivable or to avoid entirely the problem of passing on credits.

With the relationship established, as shown in the second working capital statement, the sale of accounts would be a continuous process, with the factor conducting all of the functions ordinarily carried on by the credit and collection department. The business would, in effect, be selling on a cash basis. Some factors with a broad experience may be able to give valuable merchandising counsel. They may supply premises for the storage and display of goods and aid in handling imports and exports. As already indicated, they have in some lines been sales representatives. [8]

The chief disadvantages of factoring lie in (1) the relatively high cost of the funds, (2) the possible restrictions it may place on selling because of the credit standards of the factor, and (3) the possible objections of customers to paying to a credit institution rather than to the vendor of the merchandise.

That factoring performs a function not met by other credit institutions is evidenced by its spread from textiles to the clothing, shoe, fur, furniture, glassware and china, electrical appliance, lumber, fuel oil, and paper industries. Its development, like that of some other specialized credit institutions, can be ascribed in part to our unit banking system. Under our system of scattered independent banks, a local industry is often separated from banking facilities, or at least from units of sufficient size to serve its reasonable borrowing needs. In addition, the factor renders other services to his customers. As might be expected from the nature of his operations, the factor acquires a large part of the funds for conducting his business from the commercial banks and the commercial paper market. In recent years, some of the larger factoring firms have sold securities to the public.

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s For a more detailed account of the work of the modern factor, see Owen T. Jones, "Factoring," *Harvard Business Review,* Winter, 1936, pp. 186-199.

Installment Paper

Installment paper arid the finance company. With the rapid rise in the volume of installment selling of consumers' goods, the role of the finance company has grown to one of considerable importance in the provision of current funds. Installment paper first achieved importance in connection with the mass distribution of automobiles after 1920. Financing this large volume of paper was much too burdensome a problem for the manufacturer or the distributor to care for with trade credit. Banks, particularly at first, did not feel able to cope with the special difficulties surrounding this paper. The work was taken up by specialized finance companies. Their success in handling this type of paper led to its expansion in the sale of such items as washing machines, mechanical refrigerators, radios, and pianos. While finance companies may also lend upon accounts receivable, conduct some factoring business, and finance equipment installations, their main business has been derived from the discounting of retail installment paper and wholesale paper, particularly of automobiles.[9]

When goods are sold to customers by retailers on installment credit terms, ordinarily a down payment is made in cash, and the balance is represented by "installment paper." Included in the face of this paper will be the financing charge and any special costs, such as for insurance of the merchandise. The paper is discounted by the finance company, which collects from the purchaser. Without the finance company, the manufacturers would have to carry the dealer's accounts, and the dealers, in turn, would have to carry the consumers' accounts with such help as they might obtain from the banks. The transfer of the burden to specialized concerns has made the financing easy, giving a great impetus to purchases on the installment plan and hence to the mass production and sale of a variety of consumers' goods. By the financing of installment sales, the finance company is caring for a most important phase of "consumer credit," but it is obvious that, in so doing, it is also solving a current financing problem that would otherwise rest heavily on the manufacturers and dealers in the goods now sold on the installment plan.

Of the "Big Three," which do about one third of the business carried on by some 1500 finance companies, General Motors Acceptance Corporation confines itself almost entirely to automobile finance, and Commercial Credit Company and Commercial Investment Trust Corporation lend on accounts receivable, household equipment installment paper, and machinery installment paper, but emphasize automobile paper. The latter two undertake a substantial volume of factorage in addition to lending upon accounts and purchasing wholesale and retail installment paper. It is estimated that over half of the present factoring volume is done by wholly owned subsidiaries of these firms. Jones, *op. cit.,* p. 189.

Methods of finance companies. The financing of retail automobile sales on the installment plan is handled largely by the finance company. (Banks and personal loan companies are just beginning to engage in installment financing to an appreciable extent.) Under the usual arrangement, the dealer collects part of the purchase price in cash and obtains either one or a series of promissory notes covering the schedule of monthly payments. The payments are likely to run for 12 or 18 months. The dealer may merely act as agent for the finance company, which passes upon the credit application and retains a lien upon the car either in the form of a chattel mortgage, a conditional sale, or a lease. The payments are made directly to the finance company.

Under the "recourse" plan, the dealer will endorse the buyer's paper, in which case he incurs contingent liability for the payments, agreeing to take over all repossessed cars and to reimburse the finance company. Dealer objections to the original recourse plan have resulted in certain modifications, including the "repurchase" plan, which provides that in the event of default the finance company will repossess the car, and the dealer will buy it back for the amount of the unpaid installments; if the car cannot be repossessed, the finance company bears the loss save as it is covered by insurance. The nonrecourse plan is not widely used now in spite of its apparent advantages to the dealer. The reason is that the dealer is willing to remain contingently liable in order to retain the right to pass upon who shall receive credit, relying for protection upon his own judgment and his power to repossess the car.

In some lines of installment selling the merchant will be obliged to handle his own collections and may have greater difficulty in discounting his paper. Thus, in the retail furniture field, repossessions are more common and the merchandise is more difficult to identify than in the case of automobiles and refrigerators. However, the repeated contacts with the customer may have the advantage of leading to new sales.

The passing of the installment paper to the finance company results in what amounts to a cash sale for the dealer. His investment in receivables is thus eliminated, and his ability to carry on a large volume of business on a relatively small investment is increased. These advantages are in turn passed on to the manufacturer in the form of greater sales possibilities. For this reason certain manufacturers, such as General Motors Corporation and Ford Motor Company have formed their own affiliated companies, General Motors Acceptance Corporation and Universal Credit Corporation (the latter was sold to Commercial Investment Trust Corporation in 1933), and others have entered into contracts with nonaffiliated companies to handle their paper. Commercial Credit

Company has such a relation with Chrysler Corporation, and Commercial Investment Trust Corporation has contracts of this kind with a number of the independent automobile manufacturers.

The- finance company also assists the dealer in carrying the cars which he keeps in stock, by what is known as wholesale, or. "floor plan," automobile financing. The manufacturers generally require the dealers to pay cash for the cars they purchase, drawing on them by sight drafts with bills of lading attached. To obtain the required funds pending the sale of the cars, the distributors and dealers turn to the finance company, for the nature of the automobile sales business requires a large volume of current funds in proportion to the capital invested. The finance company advances from 80 to 90 per cent of the wholesale price of the car, taking the dealer's promissory note, which is secured by a direct lien on the cars. If the cars are placed on the dealer's floor, a trust receipt is usually required. As the cars are sold, the dealer clears his title to them by paying off the notes. The finance company has thus enabled the dealer to conduct his business with a minimum of owned funds.

No other industry has been so largely financed by the finance company. In other fields the dealers make more extensive use of their own trade credit and of commercial bank advances. Nevertheless, household utilities, construction in the nature of repairs and remodeling, and equipment at the point of consumption provide an important part of the finance company's volume of business. Table 35, which indicates the volume of the various kinds of paper purchased by the "Big Three" in recent years, may serve to point out the relative importance of wholesale and retail automobile paper and •other types. The figures are for the operations of the companies and their subsidiaries.

Sources of finance companies' funds. Finance companies obtain their funds from three principal sources: (1) from owners, by the sale of stock, both preferred and common, and reinvestment of earnings; (2) from long-term creditors, usually by the sale of debentures to the public; and (3) from short-term creditors, principally commercial banks and the commercial paper market. To the extent that the latter source is used, bank credit is being employed through the medium of the finance company. Banks, until recently at least, have generally been reluctant to make direct "personal" loans to the buyers of automobiles and other consumers' goods; but they have been willing to advance funds indirectly by lending to finance companies on the basis of their diversified receivables assets and the investment of the owners of the. corn-panies. In addition, the finance company made the credit investigation and supplied the collection machinery.

TABLE 35

VOLUME OF PAPER PURCHASED BY THE "BIG THREE"

GENERAL MOTORS ACCEPTANCE CORPORATION

(almost entirely confined to automobile financing)

(in millions)

Year	*Wholesale Paper*	*Retail Paper*	*Total*
1931	$310	$434	$ 744
1932	168	245	413
1933	241	276	517
1934	415	375	790
1935	567	464	1,031
1936	710	684	1,394
1937	724	671	1,395
1938	457	461	918

Source: Moody's *Manual of Investments, Banks & Finance,* 1938, p. 2062.

COMMERCIAL CREDIT COMPANY AND SUBSIDIARIES

(dollars in millions)

Year	*Retail Motor Time Sales Notes*	*Wholesale Motor Notes and Acceptances*	*Industrial Retail Time Sales Notes*	*Open Accounts, Notes Re-discounted*	*Factoring Receivables*
1931*	- 39.5%	- 22.6%	- 20.9%	- 17.0%	— ——
1932*	— 37.1	- 28.0	- 19.0	- 15.9	— —
1933*	— 32.9	— 32.6	-- 9.2	— 25.3	— —
1934	$ 96 25.4	$128 33.9	$17 4.6	$136 35.7	$ 2 .4%
1935	129 24.6	219 41.6	20 3.8	59 11.2	99 18.8
1936	224 28.0	333 41.7	40 5.0	100 12.5	102 12.8
1937	223 23.9	391 41.9	68 7.3	135 14.4	117 12.5
1938	120 22.8	172 32.6	39 7.3	102 19.3	95 18.0

* Dollar figures and factoring receivables as percentage of total paper are not available for these years.

Source: Moody's Manual *of Investments, Banks and Finance,* and Poor's *Fiscal Volume.*

COMMERCIAL INVESTMENT TRUST CORPORATION AND SUBSIDIARIES

(dollars in millions)

Year	*Retail Automobile Installment Lien Notes*	*Wholesale Automobile Lien Notes and Acceptances*	*Industrial Installment Notes*	*Accounts Receivable of Factoring Subsidiaries*
1931*	$102 28.3%	$ 53 14.7%	$ 79 22.0%	$126 35.0%
1932*	68 21.6	39 12.3	46 14.5	162 51.6
1933*	116 24.4	108 22.8	32 6.8	218 46.0
1934	225 28.9	259 33.3	39 5.0	255 32.8
1935	277 28.7	397 41.1	48 4.9	245 25.3
1936	400 34.2	411 35.1	79 6.8	280 23.9
1937	392 30.3	468 36.2	137 10.6	295 22.9
1938	190 27.3	212 30.5	76 10.9	218 31.3

* Figures do not include foreign receivables.

Source: Moody's *Manual of Investments, Banks and Finance,* and Poor's *Fiscal Volume.*

The relative importance of the various sources of funds for automobile finance companies (a) operating in twenty or more states and (b) operating in one to four states, for the period 1928 to 1936, is indicated in Table 36, which shows the ratios of liability and net worth items to total assets.[1]

In ordinary times, most finance companies obtain from 50 to 60 per cent of their funds from current liabilities, chiefly from direct bank loans and the commercial paper market. This proportion has held except for the years of business curtailment, during which current loans were cut down to take up the slack of reduced volume, and owners' equity became larger in proportion to the total. Fixed liabilities, represented by debentures, played a significant part in the financing of the larger companies until 1933-1935, when most of the issues were called and paid off.

TABLE 36

SOURCES OF FUNDS OF AUTOMOBILE FINANCE COMPANIES AS RATIOS TO TOTAL ASSETS

	Current Liabilities		*Fixed Liabilities*		*Preferred Stock*		*Common Stock*		*Surplus*	
Year	(a)	(b)	(a)	(b)	(a)	(b)	(a)	(b)	(a)	(b)
1928	.60	.60	.18	.08	.12	.21	.08	.04	.08	.05
1929	.53	.63	.20	.07	.21	.20	.08	.06	.10	.05
1930	.50	.57	.15	.08	.16	.25	.17	.08	.10	.06
1931	.51	.53	.13	.07	.19	.28	.18	.09	.11	.06
1932	.34	.41	.16	.09	.26	.36	.24	.11	.17	.07
1933	.50	.44	.07	.04	.16	.28	.18	.16	.15	.09
1934	.55	.47	.05	.04	.12	.22	.16	.13	.14	.11
1935	.63	.55		.04	.12	.17	.11	.10	.12	.09
1936	.62	.53	.17	.11	.03	.16	.12	.09	.09	.11

(a) Companies operating in twenty or more states.
(b) Companies operating in one to four states.

Beginning in 1936, the big companies again resorted to the bond market for funds. Preferred stock has declined in importance for the large companies, but it remains a significant source of funds for the smaller companies. The small companies have usually sold such stock directly to the public, whereas the larger companies have used investment bankers to distribute their bonds and preferred stock. When the preferred stock is included among the senior issues, it is evident that finance companies as a group trade heavily on equity. The risks attendant to this financial policy are presumably offset by the careful selection and diversification of their portfolios.

[1] These ratios were calculated by H. W. Huegy and A. H. Winakor, who present them in "The Financial Policies and Practices of Automobile Finance Companies," *Bureau of Business Research Bulletin No. 56* (Urbana: University of Illinois, 1938), pp. 28 and 30. The items for any one year do not add up to 100 per cent of the total assets, because the "average" ratios shown are the modal percentages for the particular item and not arithmetic means.

The sources of capital employed by the "Big Three" are indicated by Table 37, which gives data on dollars of current and funded debt, preferred stock, common stock, and surplus for the year ending December 31, 1938.

TABLE 37

SOURCES OF FUNDS OF MAJOR FINANCE COMPANIES

(in millions)

	Notes and Loans Payable	*Debentures*	*Preferred Stock*	*Common Stock*	*Surplus*
Commercial Credit Company	$ 60	$ 65	$12	$18	$35
Commercial Investment Trust Corp.	106	68	10	53	56
General Motors Acceptance Corp	162	100	—	50	36

Source: Consolidated balance sheets, as reported in Poor's *Fiscal Volume,* 1939.

Special Credit Sources

Special public or quasi-public institutions. During a national emergency, special credit sources may be made available to meet the strained situation. A case of this sort was the establishment in 1932 of the Reconstruction Finance Corporation, which is owned and financed by the Federal Government. By the end of 1938, this agency had made loans and other authorized advances totaling 7 billion dollars, of which 1.8 billion dollars were still outstanding." Banks and trust companies, agricultural financing institutions, relief and construction projects, and railroad companies have received the bulk of the funds. The railroads still owed the RFC 436 million dollars of the total of 625 million dollars which had been advanced.

Loans to utility, mining, manufacturing, and trading concerns have not played an important role in RFC financing. By the end of 1938, loans amounting to 157 million dollars had been made to "business concerns" under the provisions of Sec. 5 (d) of the RFC Act, an amendment passed in 1934. These loans were restricted to solvent businesses which were unable to obtain credit elsewhere. Their maturity was limited to five years, and the maximum to one borrower was set at $500,000. That the RFC applied rather strict standards in making these loans is evidenced by their relatively small total amount. Textiles, lumber and timber products, and machinery and transportation equipment concerns accounted for almost half of the total. Such industries had difficulty obtaining loans of the intermediate credit variety from other sources during the depression years.

Reconstruction Finance Corporation, *Report, Fourth Quarter, 1958* (Washington, 1939), pp. 44-46.

An institution designed to supply "emergency" funds to railroads only. was the Railroad Credit Corporation, which was set up in 1931 by the carriers themselves to pool and lend out the revenues resulting from the increases in freight rates granted in that year. The total fund, which amounted to about $75,000,000, was advanced to carriers to prevent interest defaults. The corporation is now in the process of liquidation, and its funds are being collected and distributed to the original contributors. About 80 per cent of the fund has thus been returned.

Although the stock of the Federal reserve banks is owned by member institutions, they are quasi-public in nature and subject to special Federal legislation. They were authorized to make direct working capital loans to industry by an amendment to existing banking acts passed in 1934, providing for advances to businesses unable to obtain required financial assistance from the usual sources. The loans were to have a maturity of not more than five years and were to be passed upon by industrial advisory committees set up in each Federal reserve district. The Federal reserve banks thus made a decided departure from their established practice of lending only to commercial banks By the end of 1938, the reserve banks had approved 2,653 applications for direct industrial loans recommended by the advisory committees, totaling $175,011,000.[12] Of such loans, $15,644,000 were outstanding." These loans were made primarily for inventory and payroll purposes.

Miscellaneous short-term creditors. Officers, directors, stockholders, and friends are occasionally available for short-term loans and are most often used by small new companies or by those which are unable to attract funds from "orthodox" sources.

Affiliated companies, particularly holding companies, may also be used as a source of current funds. Loans from such a source have the advantage of flexibility; that is, control of the amount and the terms lies with the corporate group rather than with outside creditors. The danger in the use of such advances, either loans by a parent or holding company to its subsidiaries or vice versa, is that the advances may tend to "freeze" from a current to a more or less fixed character. Railroads and utility companies which are members of intercorporate groups have made the most extensive use of intercompany loans. In the case of the utilities, the abuse of the practice has led to criticism, and under the Public Utility Holding Company Act of 1935 intercompany loans are subject to the supervision of the Securities and Exchange Commission.[14]

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[12] Board of Governors of the Federal Reserve System, *Annual Report,* 1938, p. 32.

[13] *Ibid.,* p. 45.

[14] See Chapter 25, "Holding Companies."

CHAPTER 21

DETERMINATION OF NET INCOME AND SURPLUS

Introductory: The Measurement of Net Income

Financial problems in the determination of income. The determination of income and surplus is an accounting problem, but it is also a matter of primary concern to the financial management. The chief objective behind the promotion and operation of a business corporation is to make profits—that is, as high a return as possible for the owners.[1] For that reason it is important to know how the income or profits are determined and reported, how far they are subject to the control of those who are managing the finances of the business, and what considerations govern the distribution of profits. In the last topic, which is covered in the next chapter, we come to the consideration of the last of the sources of funds—retained earnings. This chapter will concern itself with an explanation of some of the accounting conventions which one must understand in order to use the earnings statement and of the more important ways in which the determination of the income thus reported is subject to the control of management.

The earnings statement. The causes which have brought about the net profit or loss for the stockholders are recited in summary form in the profit and loss, or earnings, statement of the corporation, and their net effect is reflected in the corporation's balance sheet in the Surplus account of the net worth section: A well-constructed and complete statement should include all of the items necessary to explain to the stockholder how the Surplus has been changed from the amount shown in the balance sheet at the beginning of the year to that at the end of the year. For this reason it will contain not only the sources of gain or loss but also any dividend distributions and any adjustments made in Surplus during the year.

[1] Actually, many small businesses are founded in order to permit the promoters or owners to acquire managerial positions in which they may exploit their abilities for a larger salary than they would otherwise earn, or sometimes merely to gain a feeling of independence. Again, in the operation of very large corporations, management, especially if it lacks a substantial stock interest, may have its primary motivation in the desire to expand personal power and prestige, in pride of operating a well-managed business, or in sympathy for employed personnel.

The general form of the earnings statement will run as follows:

Gross Revenues, or Sales	$1,000,000
Cost of Goods Sold	600,000
Gross Operating Profit	$ 400,000
Operating Expenses	250,000
Net Operating Profit	$ 150,000
Other, or Nonoperating, Income	10,000
Gross Income	$ 160,000
Deductions from Income	60,000
Net Income	$ 100,000
Surplus Additions	10,000
Balance	$ 110,000
Surplus Deductions	20,000
Net Increase in Surplus	$ 90,000
Surplus at the Beginning of the Year	400,000
Surplus at the End of the Year	$ 490,000

The student of accounting will be familiar with the terms used and with variations in the form of presentation. The statement falls into three divisions: The first is devoted to the results from the regular and ordinary operations; the second to regular income and expense that are not a part of the ordinary operations or are financial items; and the last to the irregular and nonrecurring items. In the above outline form, the final step is the addition of the net result of these three sections to the previous balance sheet surplus.

The first five lines recite the earnings results of the regular operations of the business. In a service-rendering business, such as a utility, the Cost of Goods Sold figure would be absent, and the total deductions would consist of Operating Expenses. Operating revenues include not only those derived from the main line of the company's activities but from the incidental activities as well. Thus a railroad's operating activities might include the operation of its dining cars, hotels, and tourist agencies in addition to its freight and passenger business. Even when these incidental lines are conducted by separate subsidiary corporations, the results will usually be combined with those of the main company by the use of consolidated statements. Nonoperating income may come from independent corporations, from subsidiary companies operating distinct lines of business,. or from physical property not used in the regular operations. A railroad might derive income from a coal company, oil wells, or real estate; an automobile company might have an investment in an installment finance company or an ethyl

gas company. Other nonoperating income consists of returns from temporary or permanent investments in the form of dividends and interest, and from rentals and royalties. Often the only Nonoperating Expense, or Deduction from Income, is the interest on funded debt, in which case the Gross Income might be labeled Net Income Available for Interest, and the balance remaining might be called Net Profit instead of Net Income.

Some accountants divide the third section of unusual items, calling those which are the result of events during the year Profit and Loss Adjustments, and those which are in part or wholly the result of events during earlier years Surplus Changes. A profit from the redemption of funded debt at a discount would be a case of a Profit and Loss Credit. A fire loss not covered by insurance or a strike loss would be a Profit and Loss Debit. However, an increase made in the depreciation reserve because allowances in earlier years were deemed inadequate would be called a Surplus Charge, or Surplus Deduction, while the collection of accounts written off in prior years would be a Surplus Credit, or Surplus Addition. Dividend distribution may be paid from current earnings or previously accumulated surplus and so may be shown either as a separate item after the net profit balance for the year (the balance after Profit and Loss items) or as one of the Surplus Deductions.

The distinction between Profit and Loss and Surplus items makes it easier for the management and the outside financial analyst to see at a glance the results that are attributable to the year under review. If the reader is concerned only with the ordinary earnings, which are most likely to repeat themselves in succeeding periods, he will center his attention on the first two divisions of the statement.[2]

In the absence of an earnings statement, the net profits are sometimes estimated from successive balance sheets by noting the increase in the surplus, or excess of assets over liabilities and stock. Of course, due allowance must be made for increases brought about by any stockholders' investment or decreases due to dividend distributions in the period. However, when profits are measured in this way, no clues are provided as to their origin, whether they are of the recurring or nonrecurring sort, or whether they are the result of bookkeeping entries related to the events of other years, such as were discussed above as Surplus Changes. Furthermore, this approach might lead one to think of the profit-measuring process as the result of comparing annual inventories of the assets and liabilities. Actually the balance sheet figures are derived from balances continuously recorded in the books of account. Such amounts are not a reflection of current market values but values carried in accordance with accounting principles, and the balance sheet should not be expected to represent even an estimate of current worth save as provided for by these principles. Thus, when inventory has appreciated over cost, the cost figure will nevertheless be used, and when plant or other fixed assets have declined in market value more than the amount set up as depreciation, they will ordinarily be continued at the cost less depreciation figure. The governing principles must be understood if the reader is to appreciate the significance of conventional accounting reports.

With this very sketchy outline of the statement which measures the profitability of the business, we shall turn to the two matters that are of interest to the financier: (1) How is this profit and loss statement studied by the management and the investor? (2) How may the figures it reports be altered by managerial policies? Even when the statements are compiled within the framework of accepted accounting principles, there is latitude for a considerable element of judgment, and, under unusual circumstances, management may even defy these principles, provided that in so doing, it feels that the results are not misleading or unlawful.

The correct calculation of net income is important for a number of purposes; its amount must be .known in order to measure the profitability of the business from the managerial and investment points of view, to determine the amount of income taxes to be paid, and to ascertain whether the interest on income bonds has been earned and whether dividends can and should be paid. Our discussion of surplus and dividend policy, which follows in the next chapter, must therefore be prefaced by a discussion of the major items which affect the amount of the net income and of the problems confronted by management in dealing with those items. Every figure in, the income statement affects the amount of net profit which emerges at the bottom. The main concern of management is to increase this net profit by increasing the revenues of the business or by decreasing its expenses and fixed charges.

In the following discussion, the emphasis is upon those aspects which involve financial policy. Operating and other considerations are largely ignored as falling outside the scope of this work. As a result, the items of maintenance, depreciation, and taxes, which are usually found in the operating section, receive major attention. Similarly, those phases of valuation of the assets other than plant that are subject to managerial influence and may affect the reported financial condition or earnings are discussed briefly.

Operating Revenues

Both management and the investors who supply the funds of the corporation will study the earnings statement to check up on the operations. They will particularly note (1) the relation of operating revenues to the amounts invested, (2) the relation of operating expenses to operating revenues, and (3) the stability of both revenues and net income.

Revenues in relation to investment. Reference has already been made in Chapter 9 to the significance of the relation between gross revenues, or sales, and the investment in operating assets. This operating asset turnover ratio gives an idea as to whether or

not the volume of business is up to the customary relation for the industry. In the case of manufacturing and mercantile concerns, the matter can be further checked by studying the ratio of sales volume to the constituent assets—plant, inventory, and receivables.

Revenues and total expenses. But mere volume of business is not sufficient. It must yield a profit. So the next step is to note the relation of the expenses of operation to the operating revenues. This relation is called the *operating ratio.* It can be checked in turn by an analysis of the various component expenses as they relate to total sales. Too often in its scramble for sales a concern may seek business that involves expenses that are greater than the total gross profit realized upon it. Although the elimination of such transactions may reduce the volume and make turnover appear less favorable, the alert reader should be satisfied by the improvement in the more important figure of net income.

Stability of revenues and income. A study of the stability of gross revenues and net income is also of major interest. Stable earnings or earnings which are increasing regularly have definite financial advantages: (1) A greater total volume of business can generally by done with the same investment; (2) the advantages of trading on equity can be employed with greater ease and more safety; (3) financial planning is more certain; and (4) operating efficiency and the morale of personnel are likely to be better. When management can control fluctuations, such advantages should be kept in mind Of course, business variations are very often the result of uncontrollable external influences.

An unfortunate aspect of business decline is that net income falls more rapidly than gross revenues. This result follows from the presence of fixed and semifixed costs and expenses that do not readily change with the volume of operations. Such items as materials and direct labor in a manufacturing statement, salesmen's compensation on a commission basis, and taxes based on sales will vary proportionately with sales. But the indirect expenses, often called "overhead," including rents, insurance, depreciation, property taxes, and interest, remain fairly fixed. Financial risk tends to increase as this latter type of expense becomes more important.

A more specific study of the planning of sales and the control of operating expenses would carry us into the internal finances of the business. As pointed out at the beginning of this book, this important subject, although closely related, lies outside the boundaries of our subject. We shall only expand upon such operating expenses as maintenance and depreciation and upon the valuation of operating assets other than plant, and taxes; that is, our discussion will emphasize those expenses and assets which are somewhat controllable and

determined by financial policy, which affect the financial health of the corporation to a notable degree, and which are scrutinized most closely by those who supply the funds of the business.

Expenses : Maintenance and Depreciation

Maintenance and repairs. Maintenance and repairs include expenditures to keep the property in good working order and are a proper expense to be charged against the earnings of the period. Since such expense is subject to considerable variation by management, it is clear that what management decides to do about this item affects the amount of reported profit for the period. If maintenance is postponed or deferred, the net income for the period of postponement gains at the expense of the profit in the later periods when it is made up.

Maintenance and repairs should be distinguished from (1) additions and betterments, (2) retirements, and (3) depreciation. Additions or betterments that are for small items may be treated as ordinary repairs and may be charged to that expense account by conservative management. But additions of whole units are additions of capital and should be charged to the proper asset accounts. The exact line between an expense and an asset has to be determined arbitrarily at times, so that there is room for management to affect net income by its decisions in this respect. Thus, when some part is replaced at a greater cost than the original amount, the excess is properly shown as an addition to the asset account. The management may, however, prefer to treat the whole cost as a repair expense, especially if the item is not too large. In this way the property may come to show an undervaluation, or, under reverse circumstances, an overvaluation.

Retirements of property which is removed from service are not charged to the expense of the period in which the retirement occurs, but against any reserves for depreciation which have been previously set up for that purpose. Such reserves have been established by annual charges to the depreciation expense accounts of previous years, and so the ultimate retirement is anticipated. To whatever extent the cost of the retired property is not covered by such reserves or by salvage, a loss exists that is to be charged against current profits or against surplus. If such losses are charged against current earnings, the reported earnings of a prosperous year may be greatly reduced by large-scale retirements of property.

Some have argued, more often in the past than currently, that a property might well be maintained by the constant retirement of parts, so that no allowance need be made for depreciation. This argument seems most plausible where the property contains a great

many similar units of all the different kinds of buildings and equipment. The railroads have followed this theory and have made virtually no allowances for the depreciation of any property save their rolling stock. For the latter, depreciation allowances have usually been inadequate, so that any large-scale retirements cause heavy charges for amounts not covered by the reserves accumulated for that purpose.[3]

Such a policy of ignoring depreciation in the accounts and showing an expense only when a retirement or a replacement took place would have the financial advantage of making such charges low in depression periods, when old equipment is continued in service, and lessen the reported decline in earnings. In good times the better earnings could well support the heavier expense of large retirements. Reported net income would be more stable under this arrangement than under depreciation accounting. The objection to this method of accounting is that it is deceptive. Depreciation sets in as soon as the assets are purchased. To ignore it until replacements begin to occur is to overstate the assets and the earnings in the earlier years, when the property is newest and best able to bear the cost of providing for replacement because of its efficiency and low repair costs. The sum of the expenditures for maintenance plus the allowanCes for depreciation represents the expense of keeping the investment unimpaired.

While an engineer's survey might be necessary for the outsider to judge the condition of the property and the extent to which it is being kept modern and in good order, something of the same end is achieved by outsiders who note the amounts shown in the earnings statement in their relation to revenues and property. Maintenance and depreciation should be analyzed together, since extraordinary repairs and replacements will tend to prolong the useful life of an asset. Excessive reliance upon maintenance at the expense of depreciation results in the greatest understatement of real costs during depression, when the usual policy is to cut repair work to a minimum.[4]

For 1937 the total expense of maintenance of equipment and way and structure for Class I railroads amounted to $1,322,303,000. Of this amount, depreciation and retirements, which they include under maintenance, amounted to only $197,035,000, or 15 per cent. The depreciation charged on an investment of $13,879,000,000 in way and structure was $5,236,000. That charged on the investment in equipment of $5,483,000,000 was $194,221,000. Interstate Commerce Commission, *Statistics of Railways in the United States,* 1937, pp. S-92, 107.

' Prior to 1934, the American Car and Foundry Company made no charge to depreciation. The Repairs, Replacements, and Renewals account was the only allowance for wasting assets. This expense was cut from 3 3 million dollars in 1930 to 1.1 millions in 1932, 1 2 millions in 1933, and 1 6 millions in 1934, as net operating revenues declined. In June, 1934, it was decided to set up a Depreciation account, and the property was reappraised for the purpose.

Depreciation of fixed assets. From the foregoing it may be concluded that depreciation is most properly regarded as a device for treating the depreciable fixed assets as long-term deferred expenses to be spread over the useful life of the assets as operating costs. Other concepts are sometimes advanced, and, since the matter is so important to financial management, the more important may be enumerated here.

1. It is sometimes held that depreciation is a matter of valuing the assets at yearly intervals. One needs only to examine the more commonly used methods of depreciating the assets to see that the problem is treated as one of expense proration, and rarely is there any attempt to make book value (cost less depreciation) equal the secondhand, or liquidating, value of the property, even though in a few cases a readily available secondhand market exists, so that there is an arguable basis for that method. Thus, the decline in market value of automobiles used for delivery of merchandise might be used as a measure of depreciation, and it could be argued that the first year should be burdened with a depreciation allowance ascertained from market valuation. Under such accounting the business, by comparing the depreciation so figured plus repair bills, could decide whether a policy of using cars for their full life, trading them in at the end of a certain period, or buying secondhand cars, would be most economical.

In practice, however, secondhand, or liquidating, value is generally ignored, partly because of the difficulty or even impossibility of getting a value figure, as in the case of most railroad and utility property, and partly because it would introduce market fluctuations into the accounts, whereas it is generally felt that the cost of the service should be based upon the original investment.

2. Another point of view is that the purpose of depreciation accounting is to equalize the costs of replacement. This point of view errs in shifting the attention from the asset being depreciated to the replacement, which may or may not take place. Moreover, it might lead the unwary to overlook the fact that the actual cash outlays for replacements, which still remain to be met, will be as irregular as the replacements themselves and will bear no necessary relation to the depreciation allowances. Such cash expenditures will have to be included in' the budget of cash requirements and will constitute a problem of raising funds except in those rare cases where a fund for financing replacements has been set aside as the depreciation was written off.

Often there is no intention of replacing the identical units being depreciated. Furthermore, if the cost of replacing units should rise, it is hardly fair to charge current income with possible future prices.

The chief exception occurs when the whole price structure has risen or declined as the result of inflation or deflation. In a period of marked or violent changes in the price level, the monetary unit in which the accounts are kept loses its former significance as a measure of value, and, if the cost of depreciation is measured as a certain percentage of the dollars which were spent years before, the result is to misstate the economic cost in terms of the current dollars, with their changed buying power. Thus, if the price level had doubled since the purchase of the fixed assets, the depreciation allowance stated in terms of their cost would represent only one half of the amount required in current dollars to restore the original investment. Ordinary accounts make no adjustments to cover price level dislocations of this sort, although where the problem has assumed major proportions, as in Germany's post-War inflation, special accounting procedures have been devised to deal with the problem. [5]

3. Depreciation allowances are sometimes said to be "appropriations" of earnings for the purpose of replacements. Such a concept, like the preceding one, contains the objectionable emphasis upon future replacements instead of upon the asset owned. The word *appropriation* also contains the implication that the allowance is one to be made only when the management considers that the income is sufficient. Such an attitude bears mentioning, since it has existed in the past. But it can lead to the ignoring of the inevitable progress of working equipment to the junk heap and to the idea that the reserve for depreciation is n surplus reserve rather than a valuation account.

Depreciation, obsolescence, and depletion. With the general nature of depreciation stated, the next step should be to distinguish between depreciation proper and the other nonaccidental causes of the reduction of fixed asset value—obsolescence and depletion. Depletion arises from the exhaustion of some wasting asset, such as a mine, an oil well, or a tract of timber. When equipment might have a longer life than the mine on which it is being worked, it must nevertheless be regarded as having a "useful" life only equal to that of the mine and should be depreciated in that period, save for any junk or other salvage value that may exist when it is dismantled.

The distinction, between depreciation and obsolescence is that the former is physical and arises from such causes as wear in use or deterioration by exposure to weather; the latter appears when the economic life is shortened to less than the ordinary physical life because the asset has become inadequate or unsuitable, 'owing to

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See W. Collings, "European Accounting Theory," Northwestern University School of Commerce Lecture Notes, 1932.

the development of more efficient models, to changes required by governmental action, or to increased or decreased volume of operations. The inclusion of such factors as the last two makes the definition of obsolescence broader than might be inferred from its relation to the word *obsolete.* Physical depreciation is relatively predictable, but obsolescence is so contingent upon unknown future events that in most cases clairvoyance would be needed to make a forecast. Nevertheless, when experience indicates the probability of obsolescence shortening useful or economic life, as in the flying equipment of the air transport industry, the tendency is to make depreciation allowances that will tend to cover the shrinkage.[6] While the accounts and the balance sheet rarely show any titles save for depreciation and depletion, it is probably true that one of the strongest justifications for much of the conservatism in estimating useful life for purposes of computing depreciation lies in obsolescence.[7]

It should be remembered that the term *depreciation* is popularly used to mean *decline in market value* as well as in the accounting and financial sense that is employed here. The term is also used on occasion in a third sense, to cover the decline in use, or efficiency, value as time passes. In this engineering sense, depreciation may be very slight in the early years. In certain cases, when it takes some time for the parts to wear in or for experimentation to determine the most effective operating technique, efficiency may actually increase during the early periods. The decline in efficiency may be very slow or virtually nonexistent up to the time when it becomes desirable to withdraw the unit from service. This situation probably explains why the "observed depreciation" found by engineers is sometimes at variance with the depreciation recorded by the accountant.

This generalized analysis of depreciation leads us to the consideration of its treatment in the accounts.

For an account of the significance of obsolescence in the air transport industry, see H. E. Dougall and N. K. Wilson, "Air Transport Obsolescence," *Journal of Air Law,* April, 1935, pp. 192-200, and July, 1935, pp. 411-420.

The relative importance of obsolescence has been emphasized by certain studies which shoWed how much more often retirement is due to obsolescence than to physical wearing out. Thus, a study of the retirement of Consolidated Edison showed 79 per cent due to inadequacy and obsolescence as against 13 per cent due to physical condition and 8 per cent to other causes.

A survey of retirements of petroleum refinery stills with a total cost of $5,400,000 showed almost all due to obsolescence. Bleecker L. Wheeler, "Some New Aspects of Depreciation and Obsolescence," Financial Management Series No. 54 (New York: American Management Association, 1938), p. 13.

However, the relative importance of depreciation and obsolescence cannot be judged from such data. Thus, if the normal life of a still is 12 years but the service life is reduced to 8 years by obsolescence, it will be considered as 100 per cent retired because of the latter factor. Actually, however, two thirds of the loss is due to depreciation and only one third to obsolescence.

Depreciation methods. The recording of depreciation as such has no effect upon the amount of assets that come into the business, but, when income covers all expenses including such allowances, the net effect is that earnings are retained to the extent of the depreciation charges. For this reason, in constructing the budget it is ordinarily proper to consider such allowances as the "source" of so much funds. (If a deficit balance is expected after the depreciation deduction, that amount will be regarded as a drain on funds.) For that reason, as well as the fact that the net earnings reported are affected by the amount of depreciation, the method employed in allocating depreciation to the different years is a matter of first-rate importance to those in charge of finances. While no complete discussion of this complex branch of accounting is possible or desirable in this place, the different effects of some of the various methods of spreading the depreciation charges over net income warrant our consideration.[8] In discussing methods, the unmethodical arrangement of permitting management to make allowances according to whim or "personal judgment" may be mentioned, but it can hardly be listed as a "system."

1. *Straight-line method.* This method is the simplest and probably the most widely used. From the original cost of a given unit is subtracted the estimated junk or salvage value, if any, and the balance is divided by the number of years of estimated life to obtain the annual depreciation to be allowed. The allowance is obtained for each individual item of depreciable property. Under this system the total depreciation expense will tend to run fairly constant from year to year, changing moderately as the amounts of property used grows or contracts, or as depreciation ceases on particular items because a full reserve has been set up against them. Major changes may occur when a wholesale revaluation is made or the rates are overhauled because of past errors.

2. *Depreciation based on use or production.* Since the purpose of depreciation is to spread the cost of the asset over its productive life, it may be argued that it should be recorded not on the basis of months or years elapsed, as under the preceding method, but as production takes place. To do this the probable working life would be divided by the probable number of units of production or working hours of use. Such bases would have the advantage from the financial point of view of throwing the heavier depreciation charges into the periods of greatest activity, in which income would be high. The method would not only be logical but also would have the ad-

[8] For fuller treatment see Earl A. Saliers, *Depreciation; Principles and Applications* (New York: Ronald Press Company, 3rd. ed., 1939), and Perry Mason, *Principles of Public-Utility Depreciation* (Chicago: American Accounting Association, 1937).

vantage of stabilizing the reported net income. Depreciation would change from a fixed to a variable expense. Aside from the difficulties of estimating the number of production units for providing the base of this method, there is the further substantial objection that depreciation continues even for unused property.

3. Appraisal or revaluation method. The comparative merits of this method, which involves the periodical revaluation of the assets at market value, were mentioned above in contrasting the popular and the accounting concept of depreciation.

4. Fixed-percentage-of-declining-balance method. By this method, a certain percentage of initial cost is charged in the first year, and the same percentage of the balance left after previous depreciation has been deducted is charged in the following years. The effect is to make the charge heavy at first and lighter in succeeding years. (Thus, if 30 per cent were used, the book value of the asset would run as follows in successive years; 100, 70, 49, 34, 24, and so forth.) In the absence of fluctuating market prices, the preceding method (3) would have characteristics somewhat similar to this one. They both have the advantage of placing heavy depreciation charges in the earlier years, when repair bills are small, and lighter charges in later years, thereby tending to make more constant the total annual cost of using the given property.

5. Compound interest methods. Methods that involve interest assumptions, variously known as *sinking fund, compound interest,* and *annuity* methods, have been proposed and even used occasionally.[9] Probably the greatest interest in them has been shown in utility circles, where sometimes they have been felt to meet a regulatory problem.[10] The technicalities of their application are the concern of the accountant rather than the financier. For our purpose it is sufficient to note that they provide for depreciating assets at an increasing annual rate such that the write-down of the asset plus interest on the undepreciated balance of the asset for the given year is the same each year.

A financial argument for such a treatment of depreciation would be that it equalizes the annual "cost" of depreciation and interest. On the other hand, any formula that increases depreciation year by year runs counter to our common knowledge that the market worth of an asset falls more rapidly in the earlier years, which is linked with the common tendency for the cost of operating an asset to rise with age because of increasing repairs and replacements.

Such a method does contain a financial idea that is ignored by other depreciation formulas and usually by the writer on finance—

[9] For illustrations see Mason, *op. cit.,* pp. 60-67.
[10] *Ibid.,* pp. 60-67.

namely, that, as a corporation recovers the cost of its depreciable assets, it has the use of such funds in the interval before actual replacement takes place. If such sums are employed profitably, the earnings of the corporation may be increased by that amount, if it is assumed that the efficiency of the original asset remains unchanged and the expense of maintenance is constant.

A simple illustration may be had by imagining a small trucking concern which begins operation with five $1000 trucks, which it writes off by the conventional straight-line method at 20 per cent per year. At the end of the first year, the business would have enough cash from the depreciation item (20 per cent of $5,000) to purchase an additional truck, if it is assumed that revenues were sufficient to cover all expenses, including depreciation. In this manner the depreciation provides a source of funds that might, be used for expansion of operations. Calculation will show that at the end of the fifth year, when the retirement of the original equipment makes a large decrease, the total number of units does not decline to the original number, because the added depreciation on the increased number of trucks has resulted in a compound interest effect..

By spreading the depreciation on a basis that grows by an amount equal to the compounding interest on the accumulating depreciation allowances, the "sinking fund" depreciation method recognizes and counterbalances the growing earning power that comes from the reinvestment of depreciation funds. If the funds earn a rate of return just equal to that assumed by the accountant in setting up this plan, the rising depreciation will exactly counterbalance the rising earnings; if they are invested more profitably, the earnings will grow somewhat, though not on so generous a scale as when straight-line depreciation is used.

These compound interest methods are used ,much less frequently than the relatively simpler straight-line method even by utilities.n But their mention here will have served a valuable purpose if it emphasizes the importance of depreciation as a source of funds either to retire securities or to expand property. While these uses will leave the corporation without the actual cash at the moment of replacement, the intensive use of the funds and the compounded income from their active employment should make the corporation more than proportionately stronger to finance the need when it arises. This possibility of more profitable use for such funds explains why a specific fund for such allowances is rare. However, management should look forward to the coming years and make certain that the use of present sums will not leave the corporation

Ibid., p. 61.

unable to care for the burden of replacements, especially the replacement of major assets.

6. *Retirement-expense method.* In general, the "retirement" concept has been of chief interest in utility circles and has represented a revolt against rigid depreciation accounting. The contention is that property adequately maintained has an indefinite life. In accordance with this idea the accumulated allowances shown in the "retirement" reserve are not the sum of individual depreciation reserves that can be definitely allocated to specific asset items, but a general account for absorbing all retirements. A retirement reserve is created that is sufficient, in the opinion of management, to absorb annual retirements and keep any single year from bearing an unusual loss through the retirement of a major unit. The reserve rarely runs more than from 10 to 20 per cent of the total fixed asset account.

Under the customary depreciation accounting, a unit that was retired after only three fourths of the previously estimated life had elapsed would have only a 75 per cent reserve, and the balance not recovered from salvage would have to be treated as a loss in the year of retirement. But under the "retirement reserve" method the whole cost of the unit less salvage would be subtracted from the reserve.

The concept can be seen to have logic; unfortunately, the theory can easily be used to bolster a vague and careless estimate. Consequently, the accounting profession, which has had to battle for the precise and systematic handling which gained general acceptance only after the advent of the Federal income tax, is highly critical of the method.

Financial considerations in depreciation. The tendency has been to discard other methods of depreciation and adopt the straight-line form. From the financial point of view this method has the disadvantage of making the charge a relatively fixed expense.[12] In this respect a method based upon use in production would have the advantage of making reported earnings fluctuate less. In some cases this point might warrant a more serious consideration of the method than it has usually been given. Its use is logical, when the life of the particular asset is more closely related to use than to the mere passage of time. This condition is most likely to exist for the shorter-lived machines and equipment, which,

[12] Even under the straight-line method the amount of depreciation expense will have a tendency to decrease in a depression period because of the complete write-off of some assets, particularly the shorter-lived items, which bear the highest rates. Replacement of such assets will be deferred because of idle units, a tendency to economize by extending the normal life of equipment, and weakened finances Business recovery and the purchase of new equipment will tend to boost the amount of depreciation expense.

because they bear high rates of depreciation, play a larger part in the total depreciation expense than their dollar importance in the balance sheet would indicate.

On the other hand, some have argued that an estimate of the combined expense of repairs plus depreciation should be used as a basis for equal annual charges. Such an ambitious program is likely not only to minimize the difficulties involved but also to lead to dubious and arbitrary accounting and to overlook the financial disadvantage. A completely stable expense is another term for a rigid expense, and the latter will cause trouble in an unstable business world. The more fixed the expenses, the greater will be the fluctuations in reported net income. Such variations may impair the credit standing of the corporation and make financing more difficult.

From the angle of income taxation, when depreciation or repairs are charged in a year of deficit, their value as a deduction to reduce taxable income is lost. The same charges in a prosperous year are useful not only for saving on the ordinary normal income tax but in preventing the appearance of excess profits. Too often the corporation's critics look at a single good year and enter a charge of profiteering, ignoring the losses of yesteryear.

From the point of view of the stockholder, sufficient allowances for depreciation are necessary to prevent an overstatement of earnings and consequently possible dividend distributions out of capital. On the other hand, the overstatement of depreciation may mislead stockholders on the score of both earning power and asset values. In this connection, it may be pointed out that an excessive write-down of the fixed assets may have an effect that is the reverse of conservative. After the book value of the assets has been reduced to zero by this process, no further depreciation will appear. The result will be an overstatement of earnings in the following years. Because some people lay an extreme and uncritical emphasis upon reported earnings, the corporation's stock may be overvalued as a result.[13]

Among the regulated public utilities some operators, influenced perhaps by the engineering view of "observed depreciation" and efficiency, have regarded depreciation as largely theoretical. Others have doubtless feared to make depreciation allowances lest they reduce the rate base upon which they might be allowed to earn a fair return. However, if the regulatory commissions allow rates to be

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" Graham and Dodd give this practice the suggestive title of "stock watering in reverse," noting how the market overvaluation of stock on the basis of overstated earnings results from the apparently conservative step of writing down fixed assets to a nominal figure, whereas in a former time promoters misled the unwary by inflating asset values so as to impress the unskillful with the resulting high par value. Benjamin Graham and David L. Dodd, *Security Analysis* (New York: McGraw-lfll Book Company, 1934), p. 418.

charged that will yield a fair return upon investment, and depreciation is included in the expenses, the, corporation will have, recovered an amount from the consumer which can be used either to Add new property that will earn its own return to support the outstanding capitalization or else provide the cash for retiring some of the securities. Either result would mean that the utility would be able to pay a fair return on capitalization, with lower rates to the public, if it is assumed that maintenance costs did not rise with age, and also that the management would feel bolder in junking old property to make way for improvements, because reserves are available to absorb the, resulting retirement loss.

Before passing to the valuation problem for other assets, which are generally less important and give rise to less vexatious problems than the fixed assets, the advantages of a survey and appraisal of the plant and equipment at suitably long intervals should, be noted. Such a report, when made by competent and disinterested appraisers, should be valuable in financing and serve as an assurance to investors. Recognizing the imperfections of even the most satisfactory accounts, this data should be particularly valuable after a period of changing price levels or changing technology. Such an appraisal need introduce no element of distortion into the financial statements if, it is accompanied by full disclosure and proper accounting.

Expenses: Valuation of Current Assets"

In addition to depreciation, which involves the lowering of the book value of the fixed assets, accounting custom requires the 'reduction in, valuation of those current assets which have declined below cost or whatever amount at which they were originally shown on the ledger. Like depreciation, these write-downs represent no cash expenditure, but, unlike it, they do reduce items in the current asset section and so are equivalent to cash outlays in decreasing the working capital. Their proper valuation is necessary for the correct determination • of net income.

In making its estimates 'of current asset value, the corporation must consider not merely the Treasury Department regulations that govern such matters for income tax purposes, but also sound accounting principles and the laws of the state of incorporation. Even in cases where the Treasury Department might disallow a loss because it has not been "realized" with certainty, the business may feel that conservative accounting or legal requirements require its

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'For a fuller discussion of the relation of asset valuation to the determination of, income for dividend purposes, see James C. Bonbright, *The Valuation of Property,* (New York:. McGraw-Hill Book Company, 1937), Chapters XXVI and XXVII.

recognition.[15] Managements of publicly owned corporations generally prefer to err on the side of understatement when in doubt in matters of valuation.

Receivables. Accounts and notes receivable, representing the short-term debts owing to the business, are customarily shown on the ledger at their face value. Possible loss of value through cash discounts upon accounts not past the discount period or through bad debts will be reflected in separate offsetting, or valuation, accounts. But, even where management is well-informed as to the past mortality among the corporation's debtors, the bad-debt record may alter under changing business conditions. Under such circumstances there is room for differences of opinion as to a proper allowance for bad-debt losses, save where the credit sales are negligible or sales are made only to highly-rated customers, that may make marked differences in net income.

Inventories. Except where the business keeps a continuous, or 'Perpetual, inventory, the amount of merchandise on hand is ascertained at the end of each accounting period by a counting process, or "inventory." Cost is the customary basis of valuation, unless the current market at the time of inventory is lower than cost, in which case that lower figure is used. On the other hand, to show market appreciation of inventory over cost that had not been realized by a sale would not merely break a rule of accounting but might lead to a violation of the laws of certain states, which forbid dividends being paid from unrealized profits.

Two ways of showing the loss where market value has fallen below cost may be employed. Very often the inventory at the end of the period taken at the lower of cost or market value is used in the earnings statement to determine the cost of goods, sold by the following formula:

Cost of goods sold = Initial inventory + Purchases during the period — Inventory at end of period.

The result of this procedure is to include the decline in inventory below cost in the cost of goods sold and so reduce the operating profits by that amount. Some prefer a second method, whereby the

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"For illustration of accounting principles, reference may be made to standard works, such as H. A. Finney, *Principles of Accounting* (New York: Prentice-Hall, Inc., 1934 ed.), Vols. I and II, and to T. H. Sanders and others, *A Statement of Accounting Principles* (New York : American Institute of Accountants, 1938). For probleths of valuation that arise in connection with the legality of dividends, see the next chapter. *J.* C. Bonbright, *Valuation of Property* (New York : McGraw-Hill Book Co., 1937), Vol. II, Chapter XXVIII, describes some of the problems of valuation that arise under Federal income taxation. Since valuation of utility property for rate-making purposes is quite distinct from the problem of the determination of income, it is ignored here.

final inventory is kept at cost in the computation of the cost of goods sold, and the loss from inventory write-down is reported separately among the extraordinary gains and losses for the period. Since such a loss is an item that occurs irregularly and is not realized with certainty until the goods are sold in a later accounting- period, this method not only results in stating operating results with greater clarity but has the financial advantage of making a less unfavorable impression upon creditors and investors, who would otherwise have no notion as to whether the net loss was due to unprofitable current operations or to inventory loss. Investors are inclined to regard the latter as less unfavorable."

Investments. Long-term investments or investments for control purposes are usually carried at cost, except that, when bonds are bought at a price other than par, the discount or premium may be amortized by a credit or a charge to income so as gradually to bring the book value to parity by the maturity date. The stocks of subsidiaries owned by a holding company should be marked down in case there has been a more or less permanent reduction in their value below the book value.

Marketable securities carried as current assets are generally valued at the lower of cost or market. By stating the basis of valuation clearly and by providing sufficient information to enable the reader to form an idea of the probable current value and nature of any investments, the management can improve the credit standing of the corporation, for, when in doubt, the reader may suspect the worst. Although an investment in marketable securities may be a method of carrying idle cash for emergency or other purposes, and so an operating problem, it is customary to include ordinary income from them in the form of interest under nonoperating income, and gain or loss upon the occasion of sale in the profit and loss or surplus section of the annual profit and loss statement.

The fixed-price-basis inventory, were its use more common, might be recommended here as a device for minimizing reported inventory fluctuations and so having the desirable effect of stabilizing reported net income. An amount equal to normal inventory is carried at a fixed price, usually a low one, without regard to market prices. As a result, no inventory losses appear in periods of falling prices save on excess lines of stock, and no speculative profits on inventory appreciation appear when prices are rising, thereby eliminating a certain amount of "nominal" profits. The chief disadvantage might be in an injury to credit standing because of an understatement of current assets. Balance sheets prepared for credit purposes, however, might disclose market valuation in a footnote. On this method of valuing inventory, see M. B. Daniels, *Financial Statements* (Chicago: American Accounting Association, 1939), pp. 168-169. The similar effect of the "last-in-first-out" method of carrying inventory cost is explained in Arundel Cotter, *Fool's Profits* (Boston: Barron's Book Dept., 1940). This method was first permitted for income tax purposes under the Revenue Act of 1939.

Valuation of Intangibles

Intangible assets. For some industrial corporations, intangible assets play an important role, and the method by which the management values them greatly affects the book value of the stock and occasionally even the amount reported as net income. As in the case of all long-time assets, the common basis of valuing them is cost to the present owner. Intangible assets can be divided into two groups for purposes of valuation: those having a definite term of life and those not subject to regular amortization.

Intangibles having a definite legal term of life include patents, copyrights, and sometimes franchises. These are ordinarily valued at cost and written off over their life. Patents, having a life of 17 years, may be written off in even a shorter period on the grounds that they may lose their value before they have expired. Copyrights, which are issued for 28 years and are renewable for a similar period, are ordinarily written off in a much shorter period because of the tendency of book sales to decline rapidly. Franchises may be perpetual, but, when they are issued for a definite period, they should be written off during that period. The amortization of such intangibles would usually be treated as an operating expense.

Trade-marks and goodwill are intangibles not having a definite legal life. The cost of acquiring the former may be carried as long as the trade-mark has economic value. Goodwill, the most important intangible, may be defined as the capitalized value of the profits of a business which are in excess of a normal return upon the properties (exclusive of goodwill) used in the business. Sometimes, however, the term is used very broadly to cover any excess of the total value of the assets of a going concern over that part of the value which can be allocated to specific assets."

It is generally accepted that goodwill should appear on the balance sheet only when it has been paid for, and at no more than the amount paid for it. "Writing in" goodwill and paying dividends from the surplus thus created is likely to be treated by the courts as the payment of dividends out of capital. As • to whether or not goodwill should be written off, there is some difference of opinion. Many firms, for the sake of conservatism, write it off altogether or carry it at a nominal value, such as $1. Since trade-marks or goodwill can hardly be thought of as being consumed in the process of production like other assets, it would be misleading to include their amortization among the expenses of operation; a charge to the surplus would be considered the appropriate course.

" T. H. Sanders and others, *op. cit.,* p. 67. For various methods of calculating goodwill, *see* Finney, *op. cit.,* Vol. I, pp. 311-314.

Taxes

Taxes represent one of the costs of doing business over which it might appear that management has little control, since they are imposed by the governmental authority. Actually, their effect may be minimized at times by adjusting to the provisions of the law. Since such efforts are usually made by those in charge of finances, certain of the more important points connected with taxes are indicated here, even though some are only indirectly related to the financing of the business.

The more important taxes include the general property taxes, the various income taxes, and the social security,taxes. Other levies are the franchise taxes, the capital stock taxes, and the sales taxes. Other special taxes and license fees that must be paid by particular kinds of business to the state and municipality will not be considered here. The general property tax, which is levied and collected locally upon the basis of the real estate and sometimes the movable property of the corporation, is generally regarded as beyond control. However, the management can consider this tax as one of the factors to keep in mind when locating its business, and communities have often made concessions in taxation in order to attract new industries. Similarly, a municipal administration, if not too harassed by its own financial problem, may give special consideration to business property in order to preserve the continuance of industry that makes possible the employment and general business activity of the community.

Taxes upon income. Income taxes, excess profits taxes, and taxes upon undistributed profits all represent levies upon profits by the Federal Government. Although some states now use the income tax, the rates are such as to make their taxes less important than that of the ,National Government. The general influence of substantial taxes upon income is to make management conservative in reporting profits in years of prosperity. At such times there is a strong tendency to maximize depreciation (although there is little flexibility in depreciation policy for tax purposes), to be generous in making repairs and replacements, to junk old equipment not fully written off and so register the loss immediately, to write down doubtful loans and accounts to the maximum, and to .dispose of securities that show a loss. Such a policy may reduce somewhat the fluctuations in reported net profits. It would be less necessary if the Government did not limit the carrying forward of losses from one year to the next in reporting taxable net income." To whatever

"Under the Revenue Act of 1939 a net operating loss sustained in a taxable year beginning on or after January 1, 1939, will be deductible in computing income for the two succeeding taxable years.

extent an income tax law prevents losses from being carried forward to later years, the company with a fluctuating income may find that the sum of profits and deficits fora period of years results in no profit in the aggregate, but it may be obliged to pay substantial' taxes on the individual years that happen to show a profit. Such an income tax is in reality a levy upon capital.

Another reason for conservatism in the reporting of net income for tax purposes is that any saving made in a borderline situation is certain, whereas the potential saving from making the same deduction in a later year is uncertain. Furthermore, the fact that the saving is immediate means that it has a greater present value than the saving of an equal amount at a future time. The corporation has the immediate use of the dollars saved and so has a consequent saving in interest costs for these funds, which might otherwise have to be borrowed or invested by the owners.

To whatever extent the Government taxes dividends which one corporation receives from another, the holding company setup is penalized as compared with the arrangement in which the property is owned and operated directly. At the present time 15 per cent of dividends received by the corporation is subject to the income tax.

Excess profits taxes are levied when the corporation earns a relatively high rate of return. Under the present law the corporation is not required to use the book figures for net worth in stating the "declared value" of its capital stock but may set an arbitrary declaration, thereby lowering the apparent rate of profit. This declared valuation becomes the basis, however, for the capital stock tax, and so management selects a figure that, will tend to minimize the combined taxes over a period of years. Currently the Federal excess profits tax amounts to 6 per cent on net income which is over 10 per cent and under 15 per cent of the declared stock value, and 12 per cent of income that is in excess of 15 per cent of declared stock value.[19]

Excess profits taxes are especially burdensome upon corporations with a highly fluctuating income. Such concerns may depend upon high profits in good years to offset the losses in bad years in order to provide a reasonable return. The tax may also err in failing to distinguish between high- and low-risk enterprises. In the former the entrepreneur counts on a few fortunate investments to reward him for the almost invariable losses. A program of excess profits taxation tends to thrust risk taking in such fields as oil drilling, developing high-risk mines, and exploiting patents into the hands of

[19] For analysis of the current provisions and methods of minimizing the total burden of capital stock tax and excess profits tax, see Prentice-Hall, Inc., *Federal Tax Service.*

big corporations, which can,average losses in with profits because of the scope and multiplicity of their operations and thus achieve a more normal yearly return.

Should greater emphasis be placed upon book values in the determination of "invested capital" for this tax, as it was during the World War period, a strong incentive would exist to maintain assets at less conservative figures and retain such intangibles as goodwill and developmental and promotional expenses upon the books to the extent they are permitted. Current tendencies are in the opposite direction, and large corporations are likely to eliminate intangible assets even when they represent cash investment, because of the feeling that to show intangibles is not "conservative."

The third form of tax upon income, the undistributed profits tax, is designed not so much to raise revenue directly as to force corporations to distribute profits as dividends, so that stockholders, particularly wealthy ones, will not escape taxation. Under the Revenue Act of 1936 the tax was especially harsh, since it made no allowance for the weak corporation. Even the corporation with a balance sheet deficit from previous years which made it unlawful to distribute any dividends was subject to this tax if there were profits in the year of the tax levy. Corporations in need of cash to pay off pressing debts were not excepted, unless the requirement was for a previously contracted sinking fund that specifically called for its payment out of profits. Perhaps the greatest hardship was among the smaller corporations, which because of their size could not readily sell securities and depended heavily upon earnings for expansion and the gradual retirement of current indebtedness. As a result of the protests, this section of the Federal act was repealed, and the current substitute places no burden upon the corporation retaining profits.

Other taxes. The financial effects of the social security taxes, which are collected to provide employees with old-age retirement and unemployment benefits, are somewhat difficult to appraise because of their novelty and the fact that the maximum rates probably have not yet gone into effect. They are taxes not upon corporations but upon concerns with more than a nominal number of employees. It is possible that in time employers who offer stable employment may receive some credit, in which case they will have an additional incentive to level out the seasonal and cyclical fluctuations in their businesses.

Franchise and capital stock taxes have been considered earlier as one of the problems connected with incorporation.[20] Such matters as suitable par value and the choice of state of incorporation are related to the tax problem. Because of taxes upon their "capital,"

[20] See pp. 21, 52-53.

income, or sales, corporations may find it desirable to avoid "doing business" in certain states. A mail order house may minimize taxation outside of the state in which it has its headquarters and its chief assets by doing its business elsewhere by catalog and through the mails. Such sales are interstate and so not subject to the taxation of the foreign state. A concern may even use a salesman to take orders, provided the contract is made at the home office by acceptance there. However, the salesman may not carry the merchandise, nor can it be shipped from local warehouses, nor may the vendor install any equipment sold if it does not wish to "do business" in the state of the buyer. Management will need to collaborate with legal counsel to avoid unnecessary and burdensome taxation.

Taxes as an inducement to debt. If management believes it is wise to take the risks and other disadvantages that are involved in assuming funded debt, considerable savings may be made under present tax laws by employing bonds instead of stock. Their substitution for preferred stock is often possible. In addition to the organization tax, which is based on the initial authorization or issuance of stock and does not include bonds, there are the annual taxes on capital stock by both the state and Federal governments. The most substantial saving for the ordinarily successful corporation, however, will be in income taxes, because bond interest, unlike dividends, is deducted in arriving at taxable income. When, as at present, the sum of the state and Federal corporation income tax rates runs over 20 per cent of net income, the saving is important and may be sufficient to set up a sizable sinking fund. The fact that bonds characteristically pay a lower rate than preferred stocks of similar position adds another inducement to pursue a course which strong corporations, outside of the public service industries, are inclined to avoid as unconservative.

Nonoperating Items

Testing investment income. A customary check upon nonoperating income from investments for the purpose of determining whether the rate of earnings is satisfactory is to compare that income with the amount invested in these assets as shown by the balance sheet. In the case of common stock investments this check may not reveal the real earning power, since the income reflects only dividends received. Financial statements of the issuer must be available, and the amount of stock held must be known. When the value of the stocks is considerable, full disclosure is necessary in order to maximize the credit standing of the corporation, although concealment may hide weakness as well as strength. Creditors are prone to give small weight to investments of unknown nature. Corporations

have been known to conceal important earning power under the cloak of a non-dividend-paying subsidiary and then draw heavily upon it in times of distress to support depleted operating revenues. Such a device results in a more stable reported income.

The low rate of return derived from investments may also result from the practice of investing idle cash in short-term investments which are paying but little.. Since liquidity is a prime requisite in temporary investments, the low return is the price paid for that quality. Obligations of the United States Government are the most common commitment of this type. Many large industrial corporations maintain a backlog of marketable securities.[21] In 1928-1929, loans to brokers secured by stock market collateral were a favorite commitment for idle funds, because such loans commanded high interest rates combined with absolute liquidity. Much of the so-called "bootlegged" call money which flowed into the stock market during the boom was idle corporate cash.[22] This outlet for idle funds is not available now to business corporations, since under the Banking Act of 1933 member banks of the Federal Reserve System are not permitted to place loans for outsiders for this purpose.

Nonoperating expenses. After the earnings statement has covered the operating income and expenses and added the nonoperating income, a figure is, arrived at which is sometimes called *gross income,* from which the "Nonoperating Expenses" or "Deductions from Income" are subtracted. While nonoperating income most often consists of income from investments outside the business, the nonoperating expenses consist chiefly of costs for the use of borrowed funds. The most important of these is likely to be interest upon funded debt, which will include both the cash interest payments and often a fraction of the bond discount and expenses of selling the issue. Here also will be the cost of any short-term borrowing from banks or others.

Some would place cash discounts on merchandise sold under this heading as the cost of getting the customer to pay his bill in less

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[21] The importance of marketable securities is shown by their amount and their percentage of total assets and current assets in the balance sheets of some leading corporations at the end of 1936:

	Amount (in millions)	*Percentage of Total Assets*	*Percentage of Current Assets*
Amer. Tel. and Tel. Company	$170.6	5	50
Chrysler Corporation	14.4	7	10
United Shoe Machinery Corp	19.4	20	55
Corn Products Relining Company	25.2	21	50
Diamond Match Company	14.0	38	46

[22] "While some of the funds placed in the market by lenders other than banks were placed directly, most of the corporate funds were placed through banks, by transfer of deposit balance from lender to borrower. Loans placed by New York reporting banks alone "for account of others" reached a peak of 3.9 billion dollars on October 9, 1929. *Federal Reserve Bulletin,* November, 1929, p. 724.

than the full credit term. Others prefer to regard the quoted price of merchandise less cash discount as the true selling figure to appear under sales, and to consider any cash discounts which customers fail to take as the price paid for the extra favor of a credit extension. Such income from cash discounts not taken by customers would be weighed against the costs of granting credit, such as credit department expenses, collection expenses, and bad-debt losses. Advocates of the first method are likely to object that this weighing of the income and expense of credit extensions may lead one to overlook the larger aspect of credit granting—namely, that it may expand the volume of sales and so cut expense ratios by spreading general overhead expenses over an enlarged volume of sales. It is this consideration which makes difficult a nice accounting for the credit, or "banking," aspect of merchandising.

From the point of view of the business, there is much more logic for taking in purchased goods at their cash price and showing cash discounts that are not taken as a financing cost in this section. Such accounting brings home to the management the cost of trade credit and raises the question of the desirability of alternative forms of financing.

Rent expense is also found under "Deductions from Income," although it is sometimes included in the operating section by other than rail and utility concerns. It is a payment for the use of property, which, if owned, would require the investment of additional funds, and so is equivalent to the cost of so much borrowed funds or a sufficient return to induce added stockholders' investment. On the same basis royalties paid for the use of a mining or oil property would be placed here. Royalties paid by publishers, however, are so directly related to the volume of books or other artistic productions sold that they are usually treated as an operating item, even though an alternative course would be for the publisher to pay the authors a lump sum for the title and so save this charge.

As the section of the earnings statement showing for the most part the cost of borrowed funds, these deductions from income are studied by management to determine whether the cost is as low as possible and whether it involves undue risk to solvency. If too little margin of earning power over such charges exists, there is the danger of inability to pay, which is especially hazardous for the corporation with but slender current resources. When a bond issue is in prospect, investors examine with particular interest the number of times fixed charges have been earned.

With respect to control over the cost of borrowed funds, short-term interest expense, interest paid on income bonds, or rentals that are based upon sales volume have the advantage of flexibility from the financial point of view.

Surplus

Character of surplus ; earned and capital surplus. The nature of the profit and loss adjustments and surplus changes that follow the operating and nonoperating sections of the earnings statement have already been discussed. The final result is a net change in surplus, which is important because it indicates whether there has been any net addition to the investment of the stockholders that can be distributed as dividends. At this point it is necessary to point out that not all surplus is earned, and so questions will arise as to its distributable character.

To distinguish such. "unearned" surplus it is sometimes given the general covering title of "capital" surplus, although titles more definitely descriptive of the source are generally desirable. [23] Standing between the capital stock and the earned surplus, such items more generally resemble the former. In view of the financial importance of surplus, a brief summary of the sources of capital surplus is essential here.

The sources of capital surplus may be outlined as follows:

A. Surplus contributed by investment of stockholders:
   1. Sale of stock with par value for more than par, or stock without par value for more than the "stated value."
   2. Forfeited subscriptions.
   3. Stock assessments.
   4. Reduction of capital stock.
   5. Donation of stock.
   6. Gift of assets by stockholders.

B. Surplus resembling the preceding in that it represents original payment for securities issued:
   1. From merged company.
   2. From consolidation.
   3. From consolidating statements of holding company system.
   4. Resulting from reorganization of a solvent or insolvent corporation.
   5. Resulting from recapitalization.

C. Other sources:
   1. From cancellation of debts.
   2. Profit from the purchase of stock below its par or stated value or on the sale of treasury stock at more than cost.
   3. Donations by outsiders.
   4. From unrealized appreciation.

For fuller discussion of both legal and accounting aspects, see R. P. Marple, *Capital Surplus and Corporate Net Worth* (New York: Ronald Press Company, 1936).

The question of the availability of surplus for dividends is one of the problems discussed in the next chapter, and only the nature of the foregoing items need be noted here.

When surplus is created by the issue and sale of stock at more than its par or stated value, it should be clearly labeled as "Premium on Capital Stock" or "Paid-in Surplus." Any dividend from such surplus, granted that it were legally permissible, would be a return of principal, save where such surplus was created by one class of stock and paid out to another.

When a stockholder fails to complete his payments for stock subscribed for, he may forfeit payments already made. Such contributions then become a part of net worth belonging to the remaining stockholders. Since fully paid stock is normally nonassessable, stock assessments are ordinarily not compulsory, but, when such payments are made either voluntarily or as a result of a special charter or statutory situation, they represent contributed surplus.

Surplus may be created by formal action reducing the par value or stated value of the stock already outstanding. The amount of the reduction is transferred from the Capital Stock account to a Capital Surplus or Surplus from Reduction of Capital account. Such surplus has been used to permit the revaluation and write-down of assets or the elimination of a balance sheet deficit.[24]

Donated surplus may arise from a gift of stock or assets by stockholders. Such a donation is most likely to be made by major stockholders, who may be actuated by the desire to improve the position of the shares they retain, by their pride in the company with which they are closely identified, or even by some humanitarian motive.[25]

In a consolidation or merger the price paid for the stock of the new corporation is often the net worth of the corporations whose properties are being combined. If that net worth exceeds the par or stated value of the stock issued by the consolidated company, a surplus is created that is considered to be much like the paid-in surplus mentioned above. In a merger one corporation acquires the business and properties of another corporation, which is dissolved. In that case the net worth of the merged corporation is contribUted, or "paid-in," for the stock issued. Accountants commonly hold that none of the earned surplus of the absorbed company should be carried over as such to the continuing corporation but should be regarded as capital surplus.

When a holding company is treated as a corporation investing in

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[24] See Chapter 26, "Refinancing and Recapitalization."

[25] In 1921, President Julius Rosenwald donated 50,000 shares of his holdings of common stock, with a total par value of $5,000,000, to Sears, Roebuck and Company. In addition to its effect on his own continuing stake in the business, this action by the president involved the matter of personnel goodwill, for employees held a substantial portion of the company's stock.

the stock of certain other companies, no special problem of accounting for surplus arises. If, however, the corporation uses the customary "consolidated" balance sheet, which disregards the separate corporate compartments of the system and combines all assets and liabilities, eliminating' intercompany items, the result may be that the excess of assets over liabilities and securities, other than the common stock equity of the holding company, is greater than the stock and surplus of this topmost company. Such an excess will exist when the holdings in subsidiaries have been bought and carried as assets by the holding company at less than the book amount shown on the balance sheets of those subsidiaries. [26] Such surplus is of the "capital" variety.

In reorganization a new corporation may be formed to take over the business of a former company. Surplus will arise in such a case, just as in the consolidation case mentioned above, if the par or stated value of the securities issued is less than the net worth acquired. When the capital structure is readjusted by recapitalization of an existing company, then surplus may arise, much as when par or stated value is reduced (as. in A, 4 above). The old securities are replaced with new issues having a reduced total of par and stated value.

Similar in character, would, be the surplus arising when creditors agree to reduce the total of their claims, as in a composition, a type of, remedy for financial weakness discussed in Chapter .27.

When a corporation buys some of its outstanding stock for less than the amount shown as its par or stated value, the cash is reduced less than the stock account, and so surplus results. In general, it is held that a, .corporation does not profit or lose from the purchase and sale of its own stock. A possible theory to support this position would be that such a purchase or sale represents a transfer of ownership interest for which market price is more likely to reflect a correct valuation than the books. Therefore, any apparent profit can be attributed to a difference between book value and true value (such as might be due to the sale of an interest in goodwill not shown on the books) and 'not to any realization of profit. This reasoning would apply in the case of either purchase or sale. When treasury stock is sold, the further argument might be made that such stock might have been regarded as a reduction of net worth at the time of its acquisition, and then its sale would be thought of as a sale of new stock. But, when new stock is sold, neither profit or loss is deemed to be present, regardless of the relation between the offering price and either book or par value of already outstanding shares. Any surplus is regarded 'as paid-in surplus.

[26] For a simple illustration, see H. G. Guthmann, *Analysis of Financial Statements* (New York: Prentice-Hall, Inc., rev. ed., 1935),, pp. 535-537.

Donations from others than stockholders are generally regarded as capital surplus, because their form usually precludes the gift being used as other than a permanent investment, as when a municipality offers a site for a new factory building to induce its location in the vicinity. Such surplus is unusual in that it is neither the result of earnings nor the result of the contributions of owners.

As a general rule, unrealized appreciation is taboo in properly kept accounts. When, however, some pressing reason exists for showing the appreciated value of the fixed investment in plant and equipment or securities, the hazard of confusion of the resulting surplus with that accumulated from earnings may be avoided by plainly labeling it as "Surplus Arising from Revaluation of Assets." An even more conservative course would be to label the increase as a special reserve account.[27]

Some accountants have even objected to the showing of realized profits upon the sale of fixed assets as earned surplus.[28] A more tenable view would treat such profits as irregular or nonrecurring income, if it is assumed that the gain is not due to excessive reserves for depreciation previously set up.[29] The use of any such gains as the basis for ordinary dividends should, of course, be recognized as open to question. Thus, if the profit could be attributed to a rising price level, it would be nominal rather than real,- and its distribution as dividends would leave the business with less physical property than before.

Uses of capital surplus. A brief summary of the general principles that have been suggested for governing the use of capital surplus follows:[30]

1. It is proper to charge capital surplus for the following:
   (a) All returns to the stockholders of capital invested or contributed by them.
   (b) Write-downs of fixed assets or intangibles acquired through the issuance of capital stock when it is determined that the asset values at the date of acquisition were overstated.
   (c) Elimination of appreciation previously set up by a credit to capital surplus.
   (d) Capital surplus transferred to stated capital as the result of a stock dividend or by action of the board of directors.
2. Losses and write-downs of asset values (except as noted

"See p. 529.

A. C. Littleton, "Dividends Presuppose Profits," *Accounting Review,* December, 1934, pp. 304-311.

" Marple, *op. cit.,* p. 143.

"ibid., pp. 153-154.

above) are not proper charges to capital surplus so long as there is any earned surplus available.

3. When losses and write-downs exceed earned surplus, it is proper to charge the excess against capital surplus, provided that
   (a) Full disclosure is made, and
   (b) Any surplus arising subsequently is shown as dating from the date of absorption of the deficit.

Conclusions

The suitable definition of net income may be said to have a threefold purpose: (1) to state the amount from which dividends may properly be paid, (2) to assure the reasonable maintenance of the original investment of the stockholders for the proper protection of creditors, and (3) sometimes to limit the purchase of treasury stock when the law limits purchases to the amount of surplus. Directors must be familiar with the legal restrictions and requirements in order to avoid personal liability for improper dividend distributions. Beyond that, they will find it desirable to avoid practices that conflict with accounting principles which may reflect a more conservative and judicious standard than that required by law. Finally, they will need to exercise judgment within the broad limits set by the law and proper accounting in order to permit the corporation to show the most favorable long-run results. Various points at which discretion is permitted with respect to the determination of net income have been indicated in this chapter. The problems of dividend and reserve policy are discussed in the next chapter.

CHAPTER 22

RESERVES AND DIVIDEND POLICY

HETHER to retain or to distribute the surplus is one of the most important questions with which the management of the business corporation must deal. Some corporations have made a practice of growing "from within" by retaining earnings, while others have for the most part distributed the surplus available for dividends to the owners. Inspection of corporation balance sheets reveals a wide diversity of policy with respect to the forms in which surplus is retained. Some corporations are satisfied to have the surplus itself as the only cushion or buffer against shrinkage in asset value and earnings, while others set up a variety of reserves to provide for possible future losses or drains and thus limit the amount which is shown as available for dividends. This leads us then to the consideration of reserves and reserve policy. The factors to be considered in deciding questions of dividend policy will be discussed in detail later in the chapter.

Reserves

Types of reserves. The creation of all reserves has the effect of reducing the amount of "free" surplus. Some are built up when the net income for the period is charged for certain expenses, while others are set up directly from the Surplus account. Another common characteristic of all reserves is that they always have credit balances and thus never represent assets.[1] Aside from these features, reserves may have very little in common The term *reserve* is required to do duty in a variety of ways. Three types or classes may be noted: (1) reserves representing accumulated allowances for loss in asset values, generally known as *valuation reserves;* (2) reserves representing estimated liabilities; and (3) reserves representing appropriations or earmarkings of surplus.

The first two types of reserves are balanced by charges to ex-

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This treatment uses the term *reserve* in the accounting sense. In the popular sense the term implies a fund of assets set aside for a specific purpose or to meet an emergency. When such sums are segregated in corporation balance sheets, they are called *funds.*

In banking, the term *reserve,* although not so used on the conventional balance sheet, denotes the cash balances available for meeting deposit withdrawals, and the term *secondary reserve* is used to denote very liquid assets, which could be turned into cash quickly.

pense, and the surplus is affected through the Profit and Loss account. These expenses have been considered in the preceding chapter, so that the corresponding reserves deserve only brief mention. We shall be more interested in the third type of reserve, which is the type involved in decisiong with respect to reinvestment versus distribution of surplus.

Valuation and liability reserves. We have seen in the preceding chapter how the value of certain assets, such as plant and receivables, is determined When the proper expense account is charged for the estimated loss of value for the period, a reserve account is ordinarily set up in the balance sheet as an offsetting item to the asset in question. This type of reserve includes (1) the reserve for depreciation (sometimes called *reserve for retirement,* in utility accounts) ; (2) the reserve for depletion; and (3) the reserve for bad debts or doubtful accounts. Occasionally a reserve for decline in inventory values is found, although such an item is likely to represent an allowance for possible future loss (of the type discussed below) ; actual declines in the market value of inventory are very generally reflected in a reduction of the inventory account itself, rather than by an offsetting reserve account. The sums in these valuation reserves indicate the total amounts by which the particular assets have been written down and with which operations have been charged during the years.

Charging depreciation and similar expenses and setting up valuation reserves limits the net income available for dividends and retains resources which would otherwise be distributed (actually this would be distributing capital), but such a policy does not insure the replacement of the particular assets which are being depreciated. Only a specific fund or adequate working capital at the time of the replacement can do that.

It is sometimes suggested that to avoid confusion with other types of reserves, and to indicate their real nature, such items as accrued depreciation should be called "allowances" rather than "reserves." Few corporations, however, follow this practice.

The amount of some expenses or losses that are attributable to a particular period but will not be paid until a future date can be estimated fairly accurately; the proper expense account is charged, and an accrued liability account is credited. Thus wages, interest, and often taxes can be charged, and accrued wages, accrued interest, and accrued taxes can be credited. But, if the amount cannot be exactly known in advance, "reserve" accounts rather than accrual accounts are set up. Thus the estimated liability for Federal income taxes is usually indicated on the liability side of the balance sheet by a reserve for Federal income taxes, which is included among the current liabilities. Like valuation reserves, such liability re-

serves are created by charges against the net income for the period, and consequently the amount of profits available for dividends is reduced. To avoid confusion with other classes of reserves, many corporations use some other title than reserve, such as *"Provision* for Federal Income Taxes," to indicate such liabilities.

Reserves representing appropriations of surplus. Conservative management often dictates that at least some of the surplus of a corporation should be earmarked as not available for dividends, either because of contractual obligations which the company is preparing to meet, or because the source of the surplus makes it unavailable for dividends, or because it is desirable to provide a buffer against future losses and declines in asset values or to provide for future expansion. There is, therefore, a group of reserves which in reality form part of the net worth, and which are set up by charging the Surplus account. Their effect is largely psychological, for the surplus itself is in reality a general reserve account. A variety of these "true," "surplus," or "net worth" reserves is found on present-day corporate balance sheets under various names. The more important ones may be classified and identified as follows:

1. Reserves required by contracts:

Sinking fund reserve. The indenture of a bond issue may require the establishment of a sinking fund reserve as well as the accumulation of a sinking fund, Such a reserve results in the retention of earnings, so that the sinking fund disbursements will not weaken the working capital. After the bonds are fully retired, the reserve may be transferred back to surplus, although such surplus would probably not be available for cash dividends, because so much cash has been absorbed by debt retirement.

2. Reserves resulting from unrealized increases in fixed asset values:

Revaluation reserve. Conservative accounting requires that when special circumstances permit an upward revaluation in the fixed assets, the increases should be credited to a special reserve account rather than to surplus. The increased value may disappear in the future, and the impression should not be given that the stockholders have definitely gained by the increase until it is realized. If surplus were increased from this source and dividends were distributed from it, not only would the future solvency of the company be threatened, but directors might incur liability for paying dividends out of "capital."

3. Reserves resulting from managerial decisions:

(a) Reserve for plant extension, reserve for expansion, and so forth. Growth from earnings could be shown merely by allowing the Surplus account to grow as the various operating asset accounts expanded. However, setting up a reserve and reducing surplus has

the advantage of clearly indicating the determination of the management to provide for growth out of earnings and that so much of the surplus will not be available for cash dividends.

(b) Reserve for dividend equalization. Since a policy of regular dividends is usually desirable, setting up a reserve in years of high earnings to supplement possible low earnings in future periods helps to stabilize the dividend record. Occasionally preferred stock is protected by the charter provision that a certain reserve must be built up before any dividends can be paid to the common stock.[2] In order to be effective, however, free cash must be kept available, or the reserve will prove a mere bookkeeping entry.

(c) Reserve for unproductive improvements. Railroad and utility companies are often required to invest in improvements, such as elevated crossings and underground conduits, which may be socially desirable but which will not result in increased earning power. It is wise to earmark surplus in the form of reserves to provide for such improvements and prevent either a sudden load on current income or an issue of securities for which no earnings will accrue when the improvements are required.

(d) Reserve for bond or preferred stock retirement. Even though retirement is not compulsory, it may be wise to make some provision for the redemption of preferred stock, or of bonds before they come due. Although a reserve will not insure that cash will be available for this purpose, it will at least represent earnings retained somewhere among the assets which might otherwise be distributed in dividends.

(e) Reserve for working capital. This reserve, like the first mentioned, indicates the retention of surplus for expansion of operations. Its creation helps but does not guarantee adequate working capital, since the earnings may be diverted to fixed asset expansion, or excessive current debt may be incurred in spite of the additions.

(f) Reserve for contingencies. A "catch-all" reserve to provide a buffer or cushion against unforeseen situations is the only net worth reserve found on many corporation statements. While such a reserve does not represent cash, it strengthens the total asset position and adds to the protection of both creditors and stockholders.

Other reserves of the "surplus" variety will be found on corporation balance sheets, but most of them could be given one of the above names.

Some reserves are not easily classified either as liabilities or as appropriations of surplus. Between outright liabilities and net worth there is a borderline zone, in which provision is made for what may be called *possible liabilities.* The management may have to

[a] See p. 106.

make some provision for possible losses whose amounts cannot be estimated in advance but which are very likely to occur, and the probable reduction in the equity of the stockholders should be recognized in advance. For example, if the company's properties are widely distributed, it may be proper to provide against losses through self-insurance, at least in part. The Insurance Expense account is charged with an amount equal to the premium which would be paid to an insurance company, and an insurance reserve is established. Such a reserve represents a provision for possible losses of an uncertain amount, and it would appear on the balance sheet between liabilities proper and the net worth section. Reserves for workmen's compensation, damage claims, patent litigation, lawsuits pending, and similar items would be classified in the same way.[3]

The test of the real nature of such reserves would come at the time of liquidation. At that time reserves which had been set up for possible losses which had not occurred would form part of the net worth. But, since a statistical forecast of the amount of such losses is difficult for the going concern, it is best to treat some reserves as falling between liabilities and net worth.

Funds and reserves distinguished. It has already been indicated that reserves may accompany funds when required by a contract, such as a bond indenture; this raises the question of the distinction between funds and reserves in providing for future losses or outlays. Sinking funds, pension funds, and insurance funds are established to make definite provision that cash will be on hand to take care of the loss or outlay when it occurs. Setting up a reserve alone simply retains earnings in the business by making them unavailable to stockholders in the form of dividends, but it does not insure the availability of *cash* when it is needed. Accompanying the fund with a reserve protects the working capital position by restricting dividend payments.

Variations in surplus reserve policy. Inspection of balance sheets reveals a wide diversity of reserve practice. Some corporations accumulate a large surplus, which is itself a general reserve, while others set up specific reserves by appropriations for a variety of purposes. In following the latter practice, the policy of management with respect to expansion is made clearer, stockholders are informed that dividend payments are to be limited or equalized, and flexibility is maintained, since the reserves of the net worth variety

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[3] Other reserves found on industrial balance sheets provide for the following contingencies: unfinished contracts, loss on investments, foreign exchange fluctuations, excess depreciation, rents on abandoned premises, marine losses, advertising, unemployed benefits, and reorganization of units. The classification of these reserves is difficult because the amount of possible reductions in asset value or possible liability is problematical.

may be transferred back to surplus when they are not required by contract. The other extreme is indicated when all or most of the earnings are distributed in cash dividends, and new securities are sold to raise funds when they are needed. We shall return to the question of reinvestment versus distribution of earnings later, in the sections devoted to dividend policy.

Dividends and Dividend Policy

The mechanics of dividend distribution. The power to declare dividends is vested in the board of directors. Almost invariably, the bylaws of the corporation give the directors general powers in this respect, and in some cases the times at which dividends shall be declared and payable are specified.[4] When preferred stock has been authorized, the amount of the dividends and the other preferences are specified in the charter.

The general procedure in declaring and paying dividends is as follows: (1) The directors, at a meeting called and held in accordance with the articles of incorporation or bylaws, pass a resolution declaring the dividend to stockholders of record as of a certain date, payable at a later date, and notify the stockholders by letter or by publication of a notice in one or more newspapers. (2) A list of stockholders as of the date of closing the books is prepared by the secretary or, in the case of a large corporation, the transfer agent. If no record date is fixed by the resolution, the list of stockholders is deemed to be made up as of the close of business on the day of the passage of the dividend resolution.[5] (3) The treasurer or transfer agent draws up the checks, dated as of the date the dividend is payable, and these are mailed out a day or two in advance, so that they will reach the stockholder on the date of payment. When a transfer agent is employed, the corporation deposits the necessary funds in a special account, on which the agent draws.

Who is entitled to the dividend? The passage of a resolution declaring a cash dividend creates a debt against the company and makes the stockholders general creditors for the amount of the dividend. Since the stock may change hands frequently, the question as to who is entitled to the dividend becomes important. If the stock is correctly transferred—that is, if the certificate is duly endorsed or assigned and delivered—the legal title passes to the

[4] See p. 64.

[5] The rule prevailing on the New York Stock Exchange and on other exchanges differs somewhat from the legal rule. According to the exchange rules, the date of stock record is the day preceding the date fixed by the dividend resolution, or the day on which the transfer books are to be closed, as the case may be. Shares are sold "ex-dividend" on that day; theoretically, the price declines as the result of the fact that the dividend has been cut off from the stock. Purchasers on and after that day get the stock certificates, but the dividends go to the stockholders of record.

buyer. The corporation is discharged from liability in cases of dispute between different persons claiming the dividend, when it sends the dividend check to the stockholder of record. When the stock is sold after the date of record, but before the date of payment, the dividend belongs to the seller.

All stockholders of the same class receive the same dividend per share, so that the amount received by any stockholder depends on the number of shares of that class which he owns. Distinctions between classes of stock with respect to the rate and priority of dividends should be clearly stated in the charter.

Control of stockholders over dividend policy. Unless questions of legality are involved, the payment or withholding of dividends is a matter of business policy over which the directors have complete jurisdiction. The stockholders delegate to the directors the control of dividend policy and are bound by their decision. Since profits earned become the property of the corporation and not of the individual stockholders, the stockholders ordinarily have no legal right to demand any part of them. There are only a few cases on record in which stockholders have forced the declaration of dividends on grounds other than fraud. Only on rare occasions, when the courts have been convinced that the directors were actuated by some, motive other than the best interests of the stockholders, have they forced the declaration of dividends. Such a case arose in connection with the Ford Motor Company in 1916, when suit for more liberal dividends was brought by minority shareholders. At the time, the company had a surplus of $112,000,000 and over $50,000,000 in cash on hand. Mr. Ford was determined to limit dividend payments to the current rate of 60 per cent on the company's capital stock of $2,000,000, so that the business might expand and employ more labor. The court held that it was the duty of the directors to administer the corporation for the benefit of the stockholders rather than for humanitarian purposes and decreed that an extra dividend of $19,000,000 be declared and paid.[6] Shares held outside the Ford family were subsequently bought up to prevent further trouble with minority shareholders.

The courts might, however, compel the payment of dividends' on preferred stock if the charter provides for payment in any year in which dividends are earned, or in case dividends are earned and paid on the common stock. It should be noted, however, that cases of the former are unusual. As we have seen, declaration of preferred dividends is usually discretionary with the directors.

Dividend policy—a matter of legality as well as of expediency. When the board of directors meets to decide on dividend policy, two questions have to be answered: (1) Would the payment of a

[6] Dodge v. Ford Motor Company, 204 Mich. 459 (1919).

dividend be legal? (2) Would it be financially expedient, and, if so, in what amount and in what form should it be made?

The question of legality is a very complex one, because of the lack of uniformity among the laws of the 48 states. Ignoring rare and obsolete laws, we may group the various statute and common-law restrictions under the following headings: [7]

1. No dividends may be paid when the company is insolvent or when the payment would result directly in insolvency—that is, in creating an excess of liabilities over assets.
2. No dividend may be paid unless the value of the assets, after the payment, exceeds the legal capital; in other words, dividends must not impair the legal capital (the par or stated value of the stock).
3. No dividend may be paid except from the balance of earned surplus. This rule has the most important exceptions.

While the insolvency rule is followed in only about one third of the states, it would be a sound rule of policy in all cases. [8] For the most part the capital-impairment rule dominates. The theory is that the investment of the stockholders must not be returned to them as a distribution of profits, for such distribution jeopardizes the position of creditors and misleads the stockholders.

Another way of stating the capital-impairment rule is to say that a surplus must exist before dividends can be declared. But surplus might or might not be derived from earned net income. The corporation law in a number of states deals specifically with the payment of dividends from paid-in surplus, some allowing dividends from this source without restriction. In general, there is a growing tendency to limit the use of paid-in surplus to preferred dividends, to restrict the distribution of surplus arising from a reduction of the legal capital, and to require that stockholders be given notice when dividends are paid from any source other than earned surplus. [9]

J. C. Bonbright, *The Valuation of Property* (New York: McGraw-Hill Book Company, 1937), pp. 915-916.

Excellent discussions of the law of dividends are found in the reference just cited, Chapter XXVII, and in the following: J. L. Weiner, "Theory of Anglo-American Dividend Law," *Columbia Law Review,* December, 1928, p. 1046; April, 1929, p. 461; November, 1929, p. 906; and March, 1930, p. 330. H. W. Ballantine and G S Hills, "Corporate Capital and Restrictions upon Dividends;" *Accounting Review,* September, 1935, p. 246. T. H. Sanders and others, *A Statement of Accounting Principles* (New York: American Institute of Accountants, 1938), pp. 45-52.

In a few states the insolvency limitation stands alone, as in Massachusetts, Mississippi, New Hampshire, and Texas. In 14 states it is added to one of the other limitations (for example, in California, Colorado, Illinois, Maryland, and Ohio).

R. P. Marple, *Capital Surplus and Corporate Net Worth* (New York: Ronald Press Co., 1936), p. 17. Surplus from the reduction of capital stock is available for dividends in 12 states; in an equal number, "solvency" is the limit beyond which a distribution may not extend.

The Delaware law is unique in that it permits the payment of dividends out of profits earned during the current or the preceding fiscal year or both, even though a prior deficit exists, provided the assets are not depleted below the amount of capital represented by the preferred stock's preference as to assets. The statutes of California and Minnesota are similar in that, subject to the insolvency rule, the former permits dividends to the amount of net income for the preceding accounting period (6 to 12 months), and the latter permits dividends to the amount of income for the current or preceding fiscal year.[10] The charter of a particular corporation could prohibit such a lax practice.

In defining earned surplus, the-statutes and the courts are coming to accept common accounting practice. The propriety of allowing for depreciation is generally recognized. Allowance for the decline in value of other assets has been neglected in some states and insisted on in others to a varying degree. The more recent state laws forbid the payment of cash dividends out of surplus arising from unrealized appreciation of assets, but the rule does not generally apply to stock dividends.

The penalties for payment of illegal dividends vary from state to state. In a few states the directors are criminally liable. In most of them the directors are liable to the corporation and its creditors, and individual stockholders may be sued separately to recover the payments made to them.

Factors determining the amount of cash dividend payments. If it is assumed that a proposed dividend is legal, the further question of its financial expediency must be considered. Dividend policy varies from company to company and from time to time, so that it is difficult to generalize as to the conditions under which dividends should or should not be paid, what the amount of the dividends should be, and what form they should take. The following factors are suggested as the more important considerations to be taken into account by the board of directors in determining the amount of cash dividends to be declared. They apply particularly to dividends on common stock, for we shall assume that preferred dividends are distributed when earnings and working capital justify their payment, on the grounds that they are usually cumulative and therefore must be paid before dividends on the common stock can be distributed.

1. *The amount of earnings available.* This is obviously the main controlling factor. The balance in the Earned Surplus ac-

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[10] In England, it is generally accepted that a corporation may use current earnings for dividends without first eliminating any deficit. Charles F. Schlatter, "Payment of Dividends Before Restoring Impaired Capital," *Journal of* Accountancy, March, 1923, pp. 172-185.

count, built up by past and present earnings, sets the upper limit to dividend payments under ordinary conditions.

2. The stability of earnings. As important as the amount of earnings is their stability, particularly stability as affected by the business cycle. Corporations producing or selling low-price necessities, such as retailing, tobacco, food, and utility companies, can usually afford to distribute a higher proportion of earnings in dividends than can companies which must pile up a backlog of surplus during prosperous years. Examples of companies which enjoyed relatively stable earnings during the depression and consequently could afford more generous dividends during good years are given in Table 38.

TABLE 38

TYPICAL COMPANIES WITH RELATIVELY STABLE EARNINGS DURING DEPRESSION

	Earnings per Share							*Total*	*Total*
	1930	*1931*	*1932*	*1933*	*1934*	*1935*	*1936*	*Earned*	*Dividends*
American Tobacco Co	$8.56	$9.07	$8.46	$3.00	$4.46	$4.57	$3.71	$41.83	$43.25
Cream of Wheat Corp	3.11	2.51	2.50	2.15	2.26	2.01	2.34	16.88	16.00
Pacific Gas & Electric Co	3.07	2.79	2.10	1.48	1.52	2.10	2.55	15.61	12.38
United Shoe Machinery Corp.	3.88	3.31	2.94	2.42	3.93	3.66	4.29	24.43	27.00

3. The cash and working capital position of the company. The amount of cash dividends which may be declared is directly dependent on the company's current position. When a cash dividend is declared, a current liability is created in the form of dividends payable; when the dividend is paid, cash is reduced. A large balance in the Surplus account or large current profits are not the elements which alone determine the financial ability to pay cash dividends. A corporation may enjoy large earnings and accumulate a large surplus but at the same time have its assets invested in fixed or semifixed form. Borrowing to pay dividends might be justified if cash is expected to flow in from the conversion of other assets in the near future. But, as a rule, cash or assets convertible into cash must be present in such amount that, after the dividend is paid, enough will remain to carry on the normal business operations and provide for current liabilities. The conversion of temporary investments and of highly liquid receivables and inventories should take place well in advance of the dividend distribution.

4. The source of the surplus. While surplus derived from sources other than ordinary earnings might legally be used for dividends, depending on the state law, conservative practice requires that such surplus be retained rather than distributed. This

is particularly true of *unrealized* capital surplus. The danger of paying dividends out of unrealized surplus arising from revaluation of assets is obvious; what goes up may come down. Such surplus should be placed in a reserve account indicating its origin rather than in capital surplus proper.

Even when surplus has been realized by the sale of appreciated fixed assets, there is a common feeling that the profit is somehow suspect—a distribution out of the "real capital." In view of the possibility of the profit being a nominal one due to a period of price-level inflation, the attitude may have a basis of economic justification. No legal basis for this attitude exists, however, and the gain may be used for a dividend unless the funds are needed in the business.

Surplus arising in a consolidation or reorganization because the assets contributed are in excess of the par or stated value of the securities issued is also deemed capital surplus. Such treatment holds the new corporation a distinct and new entity, the total properties turned in being regarded as the purchase price for its newly issued bonds and stocks. Actually the business is a continuing, one, and no objection would seem to arise from the point of view of sound financial policy to a distribution of the earned surpluses of the predecessor corporations by the successor if the law of the jurisdiction does not forbid such a procedure.

Dividends from premium on capital stock or from surplus derived from the sale of no-par stock at more than stated value are really a return of the owners' investment, and the owners should at least be informed, that such dividends are not derived from earnings. Generally speaking, stockholders invest their funds in order that these funds may produce earnings and not to have them returned in the form of dividends. Similarly, dividends from surplus derived from donations and assessments must be fully explained, if indeed they ought to be paid at all. Probably the only justification for ever paying a dividend from such surplus, save as an acknowledged liquidation dividend, is when directors feel an obligation to pay on a preferred issue. In such a case, payment may be important for some reason such as credit standing or the retention of voting control for the common stockholders.

5. *The reserve policy of the company.* In the discussion of reserves it was noted that corporations differ in the extent to which they earmark surplus in special reserve, accounts. Policies with respect to reserves of the surplus variety must be worked out in connection with dividend policy. When substantial appropriations are made from surplus to provide reserves for working capital, plant extension, and the like, a more conservative dividend policy results. Reserves for depreciation and depletion also affect the net income

of the company and in turn the amount of dividends which may be declared, but they should be thought of as reflecting expenses necessary for the correct determination of net income and not as surplus reserves to be set up as earnings permit.

When reserves that have been established prove to be more than adequate for the purpose for which they were created, they may be turned back into the Surplus account. Payment of dividends from this source is not objectionable as long as the stockholders are fully informed as to their origin.

6. Maintenance of regular dividends for financial reasons. When stock is held by a large number of stockholders, as in such companies as the American Telephone and Telegraph Company, General Motors Corporation, General Electric Company, and the Pennsylvania Railroad Company, the directors feel an extra responsibility for maintaining a regular dividend in order to preserve the investment position of the stock. A widespread group of contented investors lends stability to market price and makes possible the raising of new funds with less effort and on more advantageous terms. Widespread distribution and satisfactory dividends also enable the management to keep the control of the corporation, since satisfied stockholders are not likely to stage a revolution.

Fairly stable earnings, sound working capital position, widespread ownership, and desire to maintain a regular dividend record are all illustrated in the dividend policy of the American Telephone and Telegraph Company. This company, which has more stockholders than any other American corporation, has maintained a quarterly dividend of $2.25 per share on its common stock since 1922. The existence of a large surplus built up in years of higher earnings, and of a very strong working capital position, enabled the company to maintain the dividend rate in the years 1932 to 1935, although it was not earned in those years.

7. Reinvestment versus distribution. Whether earnings are distributed or retained depends largely on the management's policy of expansion. While regular and ample cash dividends are generally more satisfactory to stockholders, the best policy may be to reinvest a substantial portion of earnings and either accumulate an increasing Surplus account, earmark surplus in special reserve accounts, or distribute dividends in the form of stock.

Several factors help to determine whether the emphasis should be placed on reinvestment or on distribution of earnings: (a) Age of the company; new companies have little choice as to the source of funds for expansion. They may be able to borrow, but are almost never able to sell stock. Chief reliance must be placed on reinvested earnings. When the point of maximum growth has been reached, earnings will be distributed rather than retained, after the necessary

reserves have been established. (b) Ease of raising capital; only industries and companies enjoying good credit may depend on the sale of securities rather than reinvestment. (c) Need for conservative capital structure; companies with widely fluctuating earnings, and those with assets subject to rapid shrinkage in value, should have conservative capital structures represented mainly by stock and surplus. These companies cannot afford to distribute most of their earnings in dividends, unless stock dividends are used. (d) Future financing; building up a large backlog of surplus and appropriated reserves provides a sound basis for the sale of senior securities when resort is made to borrowing. Funds may be raised at lower rates if the owners have provided a thick cushion of equity.

Many examples of companies which have chosen to grow mainly from reinvested earnings might be cited, notably in such fields as manufacturing, merchandising, banking, and insurance; in the railway and utility fields growth has taken place mainly through public financing. Radio Corporation of America provides an interesting case. From the time of its incorporation in 1919 almost to the end of 1937, this company distributed no dividends on its common stock. An initial dividend of 20 cents per share was declared payable on December 21, 1937. There was a very good reason for the lack of dividends from 1930 to 1935, for the company operated at a deficit. But from 1919 to the end of 1929 the company had earned a total of $48,500,000 on its common stock. The price of the stock had reached a peak of $420 in 1928 despite the lack of dividends. (The stock was split five shares for one in 1929.) The rapid expansion of the company in the radio, talking machine, broadcasting, motion picture and equipment fields made the reinvestment of earnings desirable as a source of capital.

The Ford Motor Company provides the most spectacular example of growth through reinvestment. Although large percentage-wise dividends were frequently paid, such as 500 per cent in 1910 and 200 per cent in 1919, the surplus grew from zero in 1903 to $589,000,000 at the end of 1938. Capital stock, originally $28,000, stood at $17,300,000 at the end of 1938.

The Walgreen Company illustrates a change in policy from distribution to reinvestment and back to distribution. This drug chain distributed dividends on its common stock from 1916 through 1925. In December, 1925, it operated 69 stores. From 1926 to the end of 1932 no dividends were paid on the common stock, and the chain grew to 470 stores from reinvestment of earnings and acquisition of other drugstores and chains. Dividend payments were resumed in 1933, and from that year half of the earnings have been paid out.

8. *Type of capital structure.* Industries and individual companies employing large proportions of senior securities must devote

most of their earnings before fixed charges to interest and preferred dividends. In order to maintain these senior securities on an investment basis, a backlog of surplus must be built up. The retained earnings may be used to expand assets or to retire the bonds or preferred stock.

9. "Legal" investments. Companies whose bonds are on the "legal list" for the investment of the reserves of life insurance companies, mutual savings banks, trusts, and other fiduciaries have their dividend policies affected by the terms of the state laws governing the qualifications of the legal investments. When a dividend record on the common stock must be maintained in order to have the bonds remain on the legal list, there is special pressure on management to distribute dividends.

10. The effect of special taxation. A new element was injected into dividend policy with the great increases in personal income tax rates which appeared in the period after the War and again after the collapse of the boom of the late 1920's. When the surtax rates on personal income began to outstrip the rates on corporate net income, incorporation of individual enterprises and partnerships was given a special impetus, and, what was more important, an additional incentive was provided for allowing earnings to remain in the corporation rather than distributing them to stockholders, when the latter were in the upper surtax brackets. This was especially true of closely held corporations. Another tax, that imposed on improper accumulation of surplus, was designed to prevent the retention of earnings for purposes of avoiding individual surtaxes, but it apparently did little to discourage reinvestment for personal tax reduction purposes.[11]

A much more important tax provision in so far as dividend policy is concerned was introduced by the Internal Revenue Act of 1936—the much discussed surtax on undistributed corporate net, income. This tax was designed to force the distribution of net income to the individual owners, so that it could be taxed at the rates applying to their individual incomes.[12] In addition to the normal corporate tax, a surtax was applied on that portion of the undistributed net income which remained after normal taxes and dividends were paid. The rates ranged from 7 per cent on the first 10 per cent of net income to 27 per cent on 60 to 100 per cent of net income retained

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The rates are now 25 to 35 per cent of retained net income.

[12] A vast amount of discussion of this tax appeared in the public hearings on the bill and in periodicals and newspapers. Two books contain the best summaries of arguments pro and con: A. G. Buehler, *The Undistributed Profits Tax* (New York: McGraw-Hill Book Company, 1937), and M. S. Kendrick, *The Undistributed Profits Tax* (Washington: Brookings Institution, 1937). The September, 1937, issue of *Dun and Bradstreet's Review* is devoted to discussion of the tax and contains an interesting estimate of its effects on dividend policy.

in the business. Subsequent revisions of the act have eliminated this surtax.'[3]

The Federal tax on personal holding companies (corporations which receive 80 per cent of gross income in the form of interest and dividends and of which 50 per cent of the stock is owned by not more than five persons) is another special tax designed to prevent retention of income for purposes of avoiding the higher personal income taxes.

Kinds of dividends. But the foregoing discussion has been based largely upon dividends disbursed in their most usual form—namely, cash. However, dividends are paid in (1) cash, (2) stock, (3) cash or stock, (4) scrip, (5) bonds, and (6) property.

1. *Cash dividends.* Since the customary dividend in the form of cash is well known, no further description is required here.

2. *Stock dividends.* Dividends in stock rank next to cash dividends in order of frequency and amount. When stock dividends are paid, a portion of the surplus is transferred to the Capital Stock account, and stockholders merely hold a larger number of shares, but there is no change in their total equity or in the proportion which the individual stockholder owns. If no essential change in the stockholder's position is brought about by the issuance of the extra stock certificate, the question arises as to its purpose. In the first place, it is supposed to give concrete evidence that earnings have been retained in the business and that the management has confidence in the ability of the company to produce a satisfactory return on the increased investment of the stockholders. The company may show good earnings but lack the cash necessary for a cash dividend. The directors may want to give the stockholders some kind of dividend, so as to' maintain a dividend record, and at the same time conserve cash. The market may not be receptive to the sale of new securities, so that earnings may be the only source, or the most economical and logical source, of funds for expansion.

The desire to reduce the per-share market value of the stock may constitute a second reason for the stock dividend. If the stock is selling at a high price, it may be out of trading range, and as a result its distribution may be limited. Dividends in stock, especially very large stock dividends, or "melons," reduce the value of each share by spreading earnings and total equity over a larger

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[3] The former tax on undistributed profits resulted in a flood of cash dividends in the last two months of 1936 and 1937, for dividends had to be paid before the end of the tax year if the tax was to be avoided or lightened. An approximate idea of the "extras" declared may be had by comparing the dividend disbursements of major corporations in the last two months of the two years affected with other years. (Monthly dividend data are published in the *New York Stock Exchange Bulletin.)* Some of these special dividends might, however, have been spread over the following year had there been no tax pressure.

number of shares. Stock "split-ups" have the same effect except that they transfer no surplus to the stock account.[14] Stock dividends may thus be used to make the earning power of the company appear to the financially unskillful to be more modest, at least on a per-share basis. A further reason for resorting to stock dividends is to reduce the ratio of bonds to capital stock outstanding, in order to qualify the bonds as "legal" investments for institutional investors whose qualifying rule is based upon par value.

The effects of paying stock dividends, in so far as the corporation is concerned, should now be apparent. Surplus is reduced and capital stock is increased, but there is no change in total proprietorship. No liability is created 'by the declaration, for the stock dividend payable appears in the net worth section of the balance sheet. The book value and earnings per share are reduced, and market value per share is likewise lowered, unless the market overlooks the reduction in book value and earnings per share because it believes that dividends per share will continue at the same rate. Cash is conserved, and the reinvestment of earnings makes for a more conservative capital structure than would be the case if capital had been raised through the sale of senior securities. The asset and earnings protection behind the senior securities tends to be improved. It should be remembered, however, that steady stock dividends make each succeeding year's dividend requirements heavier if the same per-share rate is maintained, and, if the corporation later decides to distribute cash dividends, the burden on working capital may become very heavy.

The receipt of stock dividends has several important results in so far as the stockholder is concerned. The market value of each share may decline to the extent of the dilution, but, if the corporation is expected to maintain the same rate of dividends per share in the future, the price per share will not drop by the full amount of the dilution.[15] Should the holder of the stock prefer cash, he may

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14 The effect of stock dividends and stock "split-ups" on surplus and on book value per share may be illustrated by a simple hypothetical case. Assume that a corporation has capital stock of $100,000, which is represented by 1,000 shares of $100 par value, and $100,000 surplus. The book value per share is $200. Assume further that the company has current earnings of $10 per share. A stock dividend of 100 per cent would increase the stock to $200,000 and reduce the surplus to zero, the book value per share to $100, and the earnings per share to $5. A stock split-up of two shares for each old share of $100 par stock leaves both stock and surplus unchanged but reduces the par value per share to $50, the book value per share to $100, and the earnings per share to $5. A stock split-up of 10 shares of $10 par stock (or of no-par stock with a stated value of $10) for each old share would leave the book amount of both stock and surplus the same but would reduce the book value per share to $20 and the earnings per share to $1.

" The actual effect of stock dividends on market price seems to have been negligible in most cases. See S. Livermore, "The Value of Stock Dividends,"

sell his stock dividend, although in so doing he parts with a portion of his equity. His stock dividend as such is not taxable as income, but, if he sells it, he may be taxed on that portion of the selling price which represents a capital gain.[16] In calculating the capital gain, the cost of the portion sold is the prorata part of the original purchase price, as determined by the ratio of the number of new shares to the sum of the new and old shares.

The main effect on the stockholder is that the earnings have been permanently withheld from him and have been reinvested. In effect, he has bought more stock with the earnings he might have received in cash. However, if the rate of profit is high, he may be content to have his earnings reinvested in the corporation and thus avoid the problem of personal reinvestment.

3. *Optional dividends—stock or cash.* Occasionally the stockholder is given the option of accepting either a cash dividend or a stock dividend. In such a case he must make his decision within a certain period after receiving notice of the dividend. His decision is usually made by comparing the market value of the stock dividend with the amount of optional cash. If the two are very nearly the same, as is often the case, the cash option may be a convenience to the small stockholder, who would avoid the care and expense of selling either whole, or fractions of, shares he did not wish to keep. For the corporation that can use some retained earnings to advantage, this cafeteria style of dividend may offer a convenience, especially to the numerous small stockholders of the publicly owned concern. When the corporation has considerable need of the earnings, the option may prove embarrassing if a sudden market reaction pushes the stock below the amount of cash alternative and the whole dividend has to be paid in cash. As in most stock dividend distributions, the problem of handling fractional shares is raised.[17] To avoid issuing a large number of fractional shares to stockholders with uneven holdings, three devices are commonly employed: (1) The company pays cash for the fractional shares; (2) scrip is issued which can be exchanged for stock after the holder has purchased other fractional scrip sufficient to equal one full share; or (3) credits

American Economic Review, December, 1930, p. 687, and S. N. Siegel, "Stock Dividends," *Harvard Business Review,* October, 1932, p. 76.

"In exempting stock dividends from income taxation, the Supreme Court stated: "A 'stock dividend' shows that the company's accumulated profits have been capitalized, instead of being distributed to the stockholders, or retained as surplus available for distribution in money or in kind should opportunity offer. Far from being a realization of profits of the stockholder, it tends rather to postpone such realization, in that the fund represented by the new stock has been transferred from surplus to capital, and is no longer available for actual distribution." Eisner v. Macomber, 252 U. S. 189 (1920).

"For a full discussion of this problem, see W. C. Waring Jr., "Fractional Shares Under Stock Dividend Declarations," *Harvard Law Review,* January, 1931, p. 404.

for fractional shares may accumulate in stockholders' accounts until a full share has been obtained. The second is the most common arrangement.

4. *Scrip dividends.* When earnings justify a dividend, but the cash position is temporarily weak, scrip dividends are used, although they are relatively rare as compared with cash and stock dividends. Stockholders receive transferable promissory notes, which may or may not be interest bearing. The scrip constitutes a current liability of the company until it is paid. The use of scrip dividends is proper if the company has really earned a profit and merely has to wait for the conversion of other current assets into cash in the course of operations. The danger in the use of scrip dividends lies in the temptation to give them out as a sop to stockholders when dividends are not really justified by earnings, thereby creating a day of reckoning which could be avoided by passing the dividend. Scrip dividends may not be used to clean up accumulated preferred dividends unless so specified in the charter or unless the preferred holders so agree.

5. *Bond dividends.* In rare instances dividends are paid in bonds or notes that have a long enough term to fall outside of the current liability group. The effect is the same as that of paying dividends in scrip, except that the date of payment is postponed. The stockholder becomes a secured creditor if the bond has a lien on assets.

6. *Property dividends.* Property dividends involve the payment of assets other than cash. Such a distribution may be made whenever there are assets that are no longer necessary in the operation of the business. Property distributed in such dividends has taken the form of (a) marketable securities owned, such as the Liberty bonds distributed by the E. I. du Pont de Nemours Company in 1917; (b) securities of subsidiary corporations when their control is no longer desirable or when dissolution of the parent-subsidiary relationship has been ordered by decree, such as the special dividend of $\frac{1}{5}$ share of Radio Corporation paid by General Electric Company in 1933; and (c) very occasionally, property held as inventory.

Regular and extra dividends. Corporations that have fluctuating earnings, or that have a substantial nonrecurring profit in a given year, or that have earnings to distribute but do not wish stockholders to regard the full amount as setting a precedent for later years, may prefer to maintain their rather conservative "regular" dividend and distribute any additional amounts as "extra" dividends. By labeling the increase an "extra," the corporation avoids leading stockholders to expect it year in and year out, and it can go back to the regular rate without causing so much dissatis-

faction and market upheaval. The tax on undistributed corporate net income resulted in the distribution of many extra dividends in the last few months of 1936 and 1937. Unusually large extra dividends are known as "melons."

Liquidation dividends. In contrast to dividends which represent the distribution of surplus arising from earnings, liquidation dividends represent the return of capital to the owners of the business, either in the form of dividends arising from the operation of wasting assets, or when the corporation is winding up its affairs and distributing the net assets to its owners. Thus, a mining corporation, after distributing all of the earnings, may still have unneeded cash as a result of income covering the depletion charge. A distribution from the latter source would constitute a liquidation dividend. Similarly, a real estate corporation might pay a dividend out of funds arising from the depreciation allowance. The procedure of liquidation is considered in Chapter 29.

Conclusions. Dividend policy is clearly more than a matter of just paying out the amounts shown as net profits. The directors should pursue a policy that gives due regard to the rightful interests of personnel and consumer public and a maximum of value to the corporation's stock. Maximum dividends, together with as much regularity as possible, would appear to achieve this end. However, retained earnings that compound the earning power of the corporation may make the record of both earnings and market value more attractive than would be the case with larger dividends and expansion financed by new issues of securities. Even fairly substantial improvements and additions can be financed out of earnings without disturbing dividends too greatly if the cost is spread over a few years by debt financing.

The corporation with a public market for its stock may find a good dividend record more valuable than the retention of earnings in creating an investor following and so the means of financing through stock offerings. On the other hand, a small corporation or one with an unfortunate financial background may find retained earnings the only practical means of financing growths or of retiring a heavy load of prior securities. Indeed, when prior issues exist at greatly depressed prices and show high yield, their retirement out of earnings may be the quickest and most certain way of building up the value of the common stock.

What has been said about the desirability of regularity in payments applies with particular force in the case of preferred stocks. Since the preferred stockholder has presumably accepted a limited return in order to obtain a regular investment return, the corporation has an implied obligation to use every means to pay as regularly as possible. Such a course will improve the credit standing

of the corporation and avoid the danger of an unwieldy accumulation of unpaid preferred dividends that would bar the use of stocks as a vehicle for financing. Furthermore, the preferred stockholder has the right to receive his dividend in cash, although on occasion he may waive that right and accept some alternative offer rather than wait until cash is available to make the stipulated payment."

While retained earnings are an easy way to finance profitable expansion, they are the most logical source of funds when an unprofitable investment, such as grade-crossing elimination by a railroad, or doubtfully profitable expansion, as in a new and untried type of product, is being undertaken. The same principle would apply for a corporation obliged to undertake rehabilitation to regain lost position in its field. If earnings had deteriorated, however, the program might have to be financed by an issue of senior securities, which might then be retired out of earnings.

The current flotations of bonds and even preferred stocks at extraordinarily low rates of return create a situation such that any subsequent refinancing into common stock would inevitably dilute the earning power of the latter because the interest savings which would be available for dividends on the additional stock would be negligible. In such cases, the indicated course would be to pursue a definite program of debt retirement out of depreciation allowances on the property financed by such bonds and out of earnings, utilizing at least all of the interest saved from such low rates to that end.

A word upon stock dividends is also appropriate here. Large stock dividends, say in excess of 10 per cent, are likely to be in the nature of "melons," designed to improve the market qualities of the common stock by cutting its per-share value to a more convenient unit. Small stock dividends are generally intended to take the place of, or to supplement, cash dividends. When they are used as a part of a regular dividend policy, the surplus retained should be large enough and sufficiently profitable to prevent dilution of the per-share earning power and value. They are most logical when the stock market gives them greater value than the cash retained. If the market for the stock is lower than the book value of the stock, there is the possibility that earning power needs building, and conservative policy would usually dictate that the retained earnings be not reflected by a stock dividend.

In concluding, it may be added that the character of the stockholder list may be a factor to keep in mind in shaping dividend policy. In general, a corporation with a small group of stockholders intimately associated with the business, or one that has definitely made its appeal to a speculative type of stockholder, may

[16] See p. 641.

pursue a policy of irregular dividends with an eye solely upon the corporation's long-run advantage. On the other hand, the corporation that has attracted a public following of the small-investor class will find that a regular dividend policy will reflect the wishes of its stockholders and tend to build a following that will be helpful in any later stock financing.

CHAPTER 23

EXPANSION AND COMBINATION

THE growing importance in our economy of corporations generally and of the large corporation in particular requires that particular attention be given the financial problems involved in corporate expansion and combination. The present chapter and the two following are concerned with these problems. In this chapter certain financial aspects of corporate growth of a general nature are discussed, such as the reasons for the present tendency toward the large corporate unit or group, some of the financial problems which must be dealt with by the growing business, and the methods or devices by which growth takes place. The financial aspects of combination by informal methods, the trust, and the lease device are then considered. Chapters 24 and 25 treat of mergers and consolidations and the holding company, the most important devices through which present-day combinations are effected.

Methods of Growth

Internal versus external growth. Large corporations and corporate groups come into being in two general ways: (1) by "internal growth," a somewhat steady process of expansion through reinvested earnings or the sale of securities to the public, and (2) by "external growth," through combination with other business units by the use of such devices as the trust, the holding company, and the lease, or through outright fusion by consolidation and merger. Some of the objectives of outright combination are achieved by the informal methods which will be mentioned.

Whether growth takes place from the "inside" or by combination, the expansion which results may be classified into three general types: horizontal, vertical, and circular, or complementary. Horizontal expansion occurs when units that are engaged in producing the same products and are in the same stage of production and distribution are added to one another. This type was the first to appear, and, as a result of the monopolistic tendencies shown, these combinations were the first to feel the effect of antitrust legislation. The Standard Oil Trust and the first American Tobacco Company were outstanding examples. More recent use of the horizontal type

is found in the unified control of public utilities under the utility holding company, and in the great retail chain organizations; in both of these cases the market for an individual unit is restricted, and large-scale operation or control is possible only through control of many local units.[1]

The vertical type involves the integration of successive processes —for example, from the production of raw materials to the sale of the finished product—through the fusion of separate companies or the use of the holding company device. The United States Steel Corporation, through its subsidiaries in mining, processing, transportation, manufacturing, and distribution, is an outstanding example. Others are the International Harvester Company and subsidiaries, the Ford Motor Company (using divisions rather than subsidiaries) , and the United Fruit Company.

The circular, or complementary, type resembles the horizontal combination the more closely. This type involves the combination of units, either as divisions or subsidiaries, which produce goods that can be distributed through the same channels or by the use of similar methods. Prominent examples are General Foods Corporation, whose subsidiaries include companies producing beverages, breakfast food, baking powder, and so forth; Standard Brands Inc., also in the food group; and General Motors Corporation, whose divisions and subsidiaries produce and sell radios, refrigerators, and other electric appliances as well as motors and motor accessories. In recent years, this type has become more prominent because of the increased emphasis which competition has placed on problems of distribution.

Expansion

Motives for expansion. Much has been written concerning the motives which lead to the promotion of combinations or to the expansion of individual concerns. Personal ambition, the speculative urge, and the creative impulse have all been cited as lying behind the actions of the managers and promoters of the big corporate groups which dominate American business. These factors have undoubtedly played a part. But two other motives, both of them financial in nature, have probably been most important: (1) the profit possibilities for persons, either inside or outside of the business, and (2) the advantages to the business itself either from more efficient operation or some degree of monopoly control.[2]

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[1] Chain store organizations started out as horizontal combinations, but some, as a result of the development of production of the goods they sell, have tended recently toward the vertical type as well.

[2] Combination to rescue a failing concern might be regarded as another situation. Actually such cases will be motivated by the desire for profit or its

Sometimes the desire to stabilize profits is mentioned as a third and distinct motive beyond that of making more profits. It is conceivable, though unlikely, that a combination might be created in order that its power over prices might be used merely to steady earnings and not to increase their total. "Stabilization" typically means to the businessman the avoidance of those recurrent price-cutting periods which are characteristic of competition, particularly in difficult depression times, and which lower profits.

Expansion from within a business may benefit executives through salary increases, bonuses, and dividends, or it may provide commissions for investment bankers for selling securities or handling the work of a combination. Consolidation and merger usually result in an increased capitalization, part of which goes to the promoter or banker for his efforts. Thus formation of big business units or groups may be undertaken primarily for the purpose of manufacturing securities for a booming securities market. There is no way of knowing how many combinations have been promoted primarily for the bankers' and promoters' bonuses involved.

On this point Willard L. Thorp comments:

> Many mergers, and some acquisitions, involve the flotation of new securities. In periods like 1928 and early 1929, when there is almost an insatiable demand for securities, the merger movement will be certain to flourish. Its most active sponsor is the investment banker. Reputable business houses merely carrying on their business under their existing organization bring a very slight volume of new securities for the banker to handle. But if they can be brought together into a new organization it may mean a large flotation of stock. During 1928 and 1929 some investment houses employed men on commission who did nothing but search for potential mergers. One business man told me that he regarded it as a loss of standing if he was not approached at least once a week with a merger proposition. A group of business men and financiers in discussing this matter in the summer of 1928 agreed that nine out of ten mergers had the investment banker at the core. The fact that the public will take the securities makes possible a sharing of the increased capitalization between the banker and the original owners and makes the owners willing to join the mergers even when they can see little technical advantage to be gained from the new organization. This is undoubtedly the explanation for many of the larger mergers during periods of prosperity.[3]

While such statements as the foregoing may exaggerate somewhat the relative importance of this factor, the big business movement of the 1920's was undoubtedly stimulated by the possibilities

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equivalent, the desire to prevent losses. An indeterminate number of bank mergers in the period 1920-1929, and especially in the desperate years that followed, were designed to forestall failures that would have injured the surviving banks.

[3] Willard L. Thorp, "The Persistence of the Merger Movement," *Supplement, American Economic Review,* March, 1931, pp. 85-86.

of profit in the financing of expansion and combination as well as by the future economies and gains which were expected to arise out of large-scale operation and control.

Advantages and disadvantages of large-scale operation. When one turns from personal motives to the corporation's interest in expansion, the general advantages of large-scale operation are usually given as reasons. The more important of these advantages, not all of which will necessarily appear in every case, may be listed as follows:

1. Production:
   a. Greater use of capital equipment and mass production.
   b. Use of expert technicians and research.
   c. Encouragement to specialization and integration.
   d. More effective use of by-products.
   e. Stabilization of production and reduction of losses from fixed expenses during idleness.
2. Marketing:
   a. Larger volume, lowered prices, and easier selling.
   b. More effective use of salesmen, since they represent a larger variety of products.
   c. Economical use of advertising media not available to smaller business.
   d. Assumption of middleman's function to reduce costs or reach customers more effectively.
   e. Transportation economies—saving in cross freights.
3. Purchasing:
   a. Economies of large-scale purchasing.
   b. Buying from original source, or ownership of original source.
   c. Control of supply of materials.
4. Administration:
   a. Greater use of statistical and accounting controls.
   b. Benefit from intercompany comparisons and exchange of ideas.
   c. Greater specialization in administrative departments.
   d. Use of higher-priced experts because of larger volume of operations to support cost.
   e. Greater use of research and testing methods.
   f. Centralization of planning for formerly separate units.
   g. Lessened labor turnover because of wider variety of job opportunities and better working conditions.

5. Financial:
   a. More efficient use of funds through coordination of successive steps in production.
   b. Lower cost of funds through better credit and access to the national capital market.
   c. Centralized control of cash, credits and collections, and inventories.
   d. Stabilization of earnings by balanced production.
   e. Reduction or elimination of competition and control of market prices.

The general objective of these points is the lowering of costs, but in addition it is possible that production may be improved in quality; marketing processes may be brought under better control; the purchase of raw materials of suitable quality may be better assured or their source may be controlled; superior administration may be had through specialization of function and the opportunity of spreading the high cost of such experts over a larger volume of operations; and financing requirements may actually be reduced by the more efficient use of funds.

The student of finance will be primarily interested in the fifth group of advantages, the direct financial advantages which are expected to result from expansion. But the others, while not directly financial in nature, are indirectly so because they are expected to lead to larger profits.

It is not to be supposed that these advantages automatically accrue to the expanding concern or group. Some of them may be enjoyed, but these may be offset by certain disadvantages which large-scale operation and combination may involve, such as the following:

1. Limitations in executive and managerial ability to control large-scale operations effectively.
2. Loss of personal contacts as personnel expands.
3. Cumbersomeness of production and administration.
4. Encouragement to overexpansion and overcapitalization.
5. Danger of arousing public hostility and burdensome regulation.

That the advantages expected to arise out of large-scale operation and control greatly outweigh the disadvantages in certain fields is evidenced by the rate at which corporate units and groups have increased in size during the past forty-odd years. However, the contrasting aspect will be found in the failure of a number of corporate giants, the lack of financial success of others, and the relative loss of position, if not of actual leadership, by others.

An historical account of the expansion and combination move-

ments in all their aspects would not be appropriate here. But a brief statement of the extent to which the tendency toward increasing size has been profitable, and of the degree to which American business has become concentrated in the hands of a smaller number of units and corporate groups, may serve to suggest the importance of the "big business" movement.

Profitability of large-scale operation in the pre-War period. The expansion and combination movement which began after the depression of the. 1890's, involving what has come to be known as the "trust movement," was based on the belief that growth in size and in profits went hand in hand, and that the advantages of size far outweighed its disadvantages. From 1897 to 1903 expansion and combination of industrial concerns was the order of the day. Railroad consolidations resulted in the formation of great systems, which concentrated the control and operation of the country's mileage in vast groups.[4] Economies of large-scale operation and the advantages of combined control were believed in religiously. But this great movement for expansion and combination came to an end around the beginning of the present century.

In addition to the panic of 1903, contributing factors leading to the cessation of this first movement were (1) the development of antimonopoly feeling, resulting in antitrust legislation, restrictive railroad legislation, and the discouraging antitrust decisions, such as the Northern Securities decision of 1904, and (2) the shift in investment interest from the railroad and industrial to the utility field after the stock market crash of 1903 and the business crisis of 1907. But it has been suggested that the main reason for the cessation of this great movement of expansion and combination was the failure of the big combinations to live up to the expectations of their promoters. In a study of 35 industrial consolidations formed in the 1890's, Dewing found that the average earnings for ten years after formation were, in 22 cases, less than the earnings of the independent plants and, in 30 cases, less than the anticipated earnings.[5] A study of 48 consolidations from 1900 to 1913 inclusive

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[4] In 1897 there were about 44 corporations, or allied groups of corporations, with capital of 50 million dollars or more. The majority were railroads. By the end of 1903, the number of 50-million-dollar industrials alone had risen to 41. According to Moody, there were 305 "trusts," or combinations, with an aggregate capitalization of over 6.5 billions, in actual operation at the beginning of 1904. Twentieth Century Fund, Inc., *Big Business: Its Growth and Its Place* (New York : The Fund, 1937), pp. 27-28.

Watkins, reporting on industrial consolidations with a capitalization of over one million dollars, concluded that, between 1890 and 1904, 237 consolidations were effected, with total capitalization of 6 billions. .In the five years 1898. to 1902 alone, 174 were formed. M. W. Watkins, *Industrial Combinations and Public Policy* (New York: Houghton Mifflin Co., 1927), Appendix II, pp. 317-324.

[5] A. S. Dewing, "A Statistical Test of the Success of Consolidations," Quar-

reaches the similar conclusion that earnings of big combines were unsatisfactory, and that the "mergers," as they were called, were no substitute for competent management—that they did not withstand the downward drift of an industry, did not avoid sharp decreases of profits in years of general business depression, and could not adapt themselves to new situations when burdened by a top-heavy financial structure.[6] A third study, involving 328 cases of mergers and consolidations effected in the period 1890-1904, seems to refute the contention that the cessation of the first big combination movement was due in part to the failure of the combination to "pan out." In this study, which includes a large and carefully selected group of cases, it was found that, regardless of how long they remained in existence, half of the mergers proved to be successful, as measured by later earnings as a percentage of capitalization.?

Large-scale operation and control in the post-War period. Whatever the financial results of business expansion and combination might have been in the great wave of expansion and combination in the pre-War period, after the War the movement went forward on an unprecedented scale. Railroad, industrial, utility, and financial enterprises were expanded and combined through reinvestment of earnings and sale of securities, and through the use of the merger, consolidation, lease, and holding company techniques. New industries, such as aluminum, motor vehicles, and motion pictures, came into being. Coupled with the advantages to be derived from concentration of control and the integration of the various processes of production and distribution was the possibility of large banker and promoter profits. Aside from the usual arguments as to the economies and advantages of large-scale operation, the period through 1929 was especially favorable. Prosperity and an optimistic outlook in the stock and bond market encouraged both internal expansion and combinations. Public hostility toward big business was absent.

An outstanding feature of the post-War combination movement was the use of the holding company device to effect the combination of units and reap many of the advantages of large-scale operation and control, not only in the industrial field, but particularly in the field of public utilities. Special attention is given to holding companies in Chapter 25.

Evidence of the post-War movement toward combination is pro-

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terly Journal of Economics, November, 1921, p. 84. This study is summarized in the author's *Financial Policy of Corporations* (New York: Ronald Press Co., 3rd rev. ed., 1934), pp. 747-750.

National Industrial Conference Board, Inc., *Mergers in Industry* (New York: The Board, 1929). See pp. 40-41 for conclusions.

Shaw Livermore, "The Success of Industrial Mergers," *Quarterly Journal of Economics,* November, 1935, p. 68.

vided by data on the number of mergers recorded in manufacturing, mining, and public utilities in the period 1919-1928.[8] During this period, of 1,268 mergers (meaning the union of corporations and the loss of identity of one or more of them), the iron and steel group accounted for 270, and the oil, nonferrous metals, textiles, and foodstuffs industries each had more than 100. The 1,268 combinations involved the union of 4,135 separate concerns and the disappearance of 5,991.[8] From 1919 through 1927 a total of 3,744 public utility companies disappeared.

Profitability of expansion. The limitations of management and the growth of overhead costs may more than counterbalance the possible profits arising from further increase in the volume of production, purchasing, and distribution. The advantage of increasing size is a diminishing one and may cease altogether after a certain point is reached. In recent years, the question of the relationship between size and profitability has commanded a good deal of attention among economists and statisticians, and a number of studies have been made to throw light on the problem. Yet there seems to have been no general agreement as to the most profitable or optimum size." This may be considered as evidence of the fact that there are motives for expansion and combination other than the expectation of larger returns on capital. One thing is certain—that is, that expansion programs deserve as careful investigation as do new promotions, for, once they are undertaken and found to be unsatisfactory, the process of retracing the steps is in most cases difficult if not impossible, especially if growth has taken place through "internal" expansion or through the outright fusion of different concerns.

Extent of concentration of ownership and control. The result of the movement for expansion and combination which has persisted for over 50 years, with important breaks only after 1902 and during the War period, has been a significant concentration of control of corporate wealth and income, which, in the minds of many, has important economic, social, and legal implications. It is not

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' Willard L. Thorp, in National Bureau of Economic Research, Inc., *Recent Economic Changes in the United States* (New York: McGraw-Hill Book Company, 1929), Vol. I, pp. 185-187.

'In 1929, 1,245 mining and manufacturing concerns disappeared, and, in 1930, 747 disappeared. Thorp, "The Persistence of the Merger Movement," p. 78.

"The reader is referred to the following studies of the relationship between size and profitability: Twentieth Century Fund, Inc., *How Profitable is Big Business?* (New York: The Fund, 1937); W. L. Crum, *Corporate Size and Earning Power* (Cambridge: Harvard University Press, 1939); W. L. Crum, *The Effect of Size on Corporate Earnings and Condition* (Boston: Harvard University Graduate School of Business Administration, Bureau of Business Research, 1934); Ralph C. Epstein, *Industrial Profits in the United States* (New York: National Bureau of Economic Research, Inc, 1934).

our purpose to discuss these implications here, but the results of three studies made since 1930 may be summarized as evidence of the fact that, through the use of the corporate form of organization, control of economic wealth and income has become very highly centralized.[1]

Berle and Means found that of over 300,000 nonfinancial corporations in the country in 1929, 200 (with assets of 90 millions or more) controlled 49 per cent of nonbanking corporate assets, 38 per cent of all business wealth, and 22 per cent of national wealth, and received 43.2 per cent of the income of all nonbanking corporations.[12] The growth in assets of the large corporation to this position of pre-eminence, from 1922 to 1927 at least, is attributable 26.5 per cent to reinvested earnings, 55 per cent to sale of securities, and 18.5 per cent to merger and consolidation. One criticism of this study is that it fails to segregate the railroad and utility corporations, in which monopoly is countenanced by public policy and regulated. These two fields are heavy users of investment funds and bulk large in the total figures. To measure concentration in the competitive field, such corporations would have to be eliminated. Among industrial corporations the value of production and the number of persons employed will also run higher per dollar investment than among the public service corporations, so that assets should not be regarded as the only measure of economic importance.

Crum, using income tax data, found that in 1931, 52.2 per cent of the total reported assets of all corporations was held by companies having at least 50 millions of assets each. Excluding the transportation and public utilities group (in which 85 per cent of total assets was held by companies having over 50 millions of assets each), the percentage amounted to 37.2 per cent. In order of the extent of concentration, the groups ranked as follows: transportation and utilities, manufacturing, finance, mining, trade, service, construction, and agriculture. In the manufacturing group proper, the order of extent of concentration in corporations with assets of 50 millions or over runs as follows: tobacco, chemicals, rubber, paper, food, store, printing, leather, and textiles. Even in the textiles group, over 70 per cent of the total assets were held by companies having at least one million dollars of assets each.

In the latest study of concentration of control, the Twentieth Century Fund found that for 1933, of the 388,564 active corporations submitting balance sheets to the Bureau of Internal Revenue,

[1] A. A. Berle, Jr., and G. C. Means, *The Modern Corporation and Private Property* (New York: The Macmillan Co., 1933); W. L. Crum, "Concentration of Corporate Control," *Journal of Business of the University of Chicago,* July, 1935, pp. 269ff ; Twentieth Century Fund, Inc., *Big Business: Its Growth and Its Place* (New York: The Fund, 1937).

[12] Berle and Means, *op. cit.,* Chapter III.

594 corporations with assets of 50 millions each, or .15 per cent of the total number of reporting corporations, held 53 per cent of the assets of the whole group, and accounted for 20 per cent of the total national income, government excluded. Sixty-nine corporations, each with a net income of five millions and over, received about 30 per cent of the net income reported, though they included only .06 per cent of all profitable corporations. Corporations with assets of 50 millions or over earned 36 per cent of all statutory net income reported, although these great corporations were only .02 per cent of the number of profitable companies. The order of degree of concentration was similar to that found by Crum. Unfortunately the representativeness of these last figures is none too certain, because the year 1933 was one of deep depression, and it might well be that the great majority of industrial corporations showed little or no net income. A relatively small number of the major public utilities, which fared relatively well during this period, would be expected to show a high proportion of total earnings in 1933, whereas their share in an average year might be a very moderate proportion.

Such figures do not tell the whole story of the concentration of wealth and income, for control is exercised through minority ownership, communities of interest, investment companies, associations, banking affiliations, and other ways which are not subject to statistical measurement. On the other hand, the ownership of our major corporations is widely scattered. The figures are evidence of the fact that big business, mainly through the use of the corporate form of organization, has become characteristic of railroads, utilities, and manufacturing, but not of agriculture, trade, and service.

Some financial problems of expansion. Expansion by reinvestment and sale of securities is a continuous and normal process in many healthy, well-managed corporations, so that the financial problems of expansion cannot easily be distinguished from what might be called everyday financial problems. The latter have already been dealt with in previous chapters in connection with the use of stock and the conditions that surround its sale through rights or through the investment banker; the use of bonds, including such devices as the open-end clause and the purchase money mortgage; and, finally, the retention of earnings. The financial problems peculiar to combination will be considered as the various forms are taken up below.

The problems which a growing corporation needs to keep in mind lest it succumb to financial troubles are (1) the maintenance of a properly balanced capital structure, (2) the keeping of financing costs at a minimum, (3) the preservation of a sound working capital position, (4) the retention of control of the corporation, and (5)

due allowance for the business cycle. Since these matters are of concern to any business, even though it is not engaged in expansion, they have been referred to elsewhere and need only to be repeated here for emphasis and as an indication of their special importance to the growing enterprise.

1. *Balanced capital structure.* The growing company is particularly prone to develop an unbalanced capital structure. To sell bonds or preferred stock is generally much easier than to dispose of common stock. In smaller companies, the management dislikes the idea of sharing either control or, sometimes, the handsome profits they envisage for the future. For them, more than for the major corporation whose management has but a small stock interest, trading on equity has the most apparent advantages.[13]

The logical source of growth—namely, retained earnings—is often neglected or insufficiently used. In the smaller corporation, those in control may elect a standard of family expenditure that dissipates earnings either through dividends or through executive salaries. In such cases, management would find it wiser to forego expansion at the price of an unbalanced capital structure if it is unwilling to make the necessary sacrifices.

2. *Minimum financial costs.* The considerations involved have been discussed in earlier chapters. Strong working capital position will enable the use of the less expensive credit channels. A strong capital structure will keep the cost of senior securities low. While common stock may at times appear expensive in terms of income that must be offered, it is appropriate to repeat that, when it is salable, its use may so enhance safety as to outweigh the possible advantages of increased return through trading on equity.

3. *Strong working capital position.* What has been said about the unwisdom of excessive debt in the capital structure applies with double force to current debt, because the constantly recurring maturities of the latter introduce the hazard of insolvency whenever there is inability to pay coupled with unwillingness of current creditors to continue their accommodation. With funded debt only the fixed charges constitute a current problem.

The current debt problem is most common for smaller corporations. The management of the larger concern does not derive the same direct advantage from the profits of expansion, and the public

[13] The Twentieth Century Fund, Inc., in its study of large and small corporations in 1933, found that the percentage of borrowed capital to total capital tends to decrease with increasing size, and that, on the whole, the corporations with assets of more than $500,000 (except the "giants" of $50,000,000 and over) get a greater proportion of their capital from stockholders (net worth of all kinds) and a smaller proportion from lenders than do the smaller ones. And a larger percentage of their borrowed capital is in the form of bonded debt and mortgages. Twentieth Century Fund, Inc., *How Profitable is Big Business?,* pp. 58-62.

capital markets are more readily available for the sale of senior issues and, if the company is successful, of common stock. Inadequate working capital is the frequently offered reason for the failure of small and medium-sized mercantile and manufacturing concerns. While an unmanageable current debt is indicated, the fundamental trouble is not explained. The inadequacy might be due to operating losses or unearned dividends but is just as likely to be the result of excessive expansion. Cash may be drained off to build up fixed assets, or current debt may be incurred to expand inventories and extend credit. The first course reduces working capital; the second lowers the current ratio. The business drifts into a vulnerable position and succumbs to the first winds of adversity.

4. Retention of control. Control of the expanding enterprise will remain in the same hands as previously if growth takes place out of reinvested earnings or by the sale of stock through privileged subscriptions. The use of nonvoting stocks or of bonds also eliminates the danger of loss of control. In expansion through combination, the lease and holding company devices may be effectively employed to gain control of large assets with a minimum of investment. More detailed discussion of these devices is reserved for later sections.

5. Adjustment to business cycle. The business cycle affects the timing and method of promotion, the type of securities which may be issued and the rates offered on them, the working capital requirements of the business, the profitability of the business and its dividend policy, and the need or opportunity for refinancing and reorganization. As for expansion, it goes without saying that both ordinary expansion and combination are encouraged by periods of prosperity, when funds are easily raised and people are optimistic. At such times, when security prices are rising, consolidations and mergers are most common

In such good times efforts should be directed toward cleaning up debt and creating a strong working capital position that will care for losses and, if possible, dividends in bad times. Common stock financing and retention of earnings must be resorted to when times are prosperous if the corporation is to have strength for depression periods.

Combination

Types of combinations. Although we are interested only in those forms of combination that go beyond cooperation and actually combine operations or at least establish a well-defined financial relationship that permits the coordination of two or more business corporations, certain "informal" arrangements are included in the

following list in order to make it a fairly complete classification of what are generally known as business combinations:

1. Cooperation that does not involve combined operation or complete control:
   a. "Gentlemen's agreements."
   b. Pools and association agreements.
   c. Communities of interest.
   d. Interlocking directorates.
   e. Purchase and sales contracts.
2. Combinations involving control of "independent" but coordinated corporate units:
   a. Trusts.
   b. Holding companies.
3. Combinations involving combined operation:
   a. Not involving fusion of corporations—the lease.
   b. Involving outright fusion and the loss of identity of one or more of the constituent companies:
      (1) Mergers.
      (2) Consolidations.

Informal cooperation. A brief statement of the nature of the various informal arrangements listed above will show that they are usually interested in price maintenance, a monopoly practice, rather than the achievement of economies such as are possible when operations of several units are combined or at least closely coordinated. Thus, "gentlemen's agreements" are merely agreements among companies with respect to sales territories or prices so as to curb cutthroat competition. They are temporary, unwritten arrangements which depend for their success upon the willingness of the members to abide by them. The early railroad agreements to divide territory and maintain certain rates, and the famous "Gary dinners," held between 1906 and 1909, at which Elbert H. Gary, Chairman of the United States Steel Corporation, led the steel producers to reach understandings as to prices, were prominent examples of the use of this method. The fact that members can withdraw from the agreement and that it generally violates the antitrust laws has caused the gentlemen's agreement to be succeeded by other devices.

Pools are more formal groupings of competing companies for the purpose of controlling prices, output, or earnings through a central organization. The early railway traffic and earnings pools soon came under the ban of the law. Industrial pools included four main types: patent pools, output or traffic pools, territory or market pools, and income pools.[14] Since their activities were usually de-

[14] L. H. Haney, *Business Organization and Combination* (New York: The Macmillan Co., 3rd ed., 1934), Chapter XI, contains a clear description of the

signed to effect monopoly, such pools also ran afoul of the law. Their lack of stability and endurance, coupled with their generally illegal nature, has led to their general abandonment.[15]

By a community of interest is meant the grouping of separate corporations within a sphere of influence through common ownership of stock by one person or a small group of persons who are bound together by common interest and family relationship or long acquaintance. This influence may be made more effective by interlocking directorates—that is, the same men sitting on the different boards of directors. Whether as a result of community of interest or interlocking directorates or both, such a group of companies will work in harmony with one another, since they are either owned or managed by the same persons. Such arrangements have played an important part in the development of railroad, industrial, and utility combinations and may be almost as effective in concentrating control as a formal device. But they have not been ignored by the law. The Clayton Act of 1914 made it illegal for one person to be a director of more than one national bank with deposits and net worth of over $5,000,000, or of more than one industrial corporation with net worth of over $1,000,000 if the corporations are, or have been, competitors. The Banking Act of 1933, which divorced investment and commercial banking, made it illegal for an officer, or director of a member bank of the Federal Reserve System to be an officer or director of an investment bank. The Transportation Act of 1920 made interlocking directorates among railway companies subject to the jurisdiction of the Interstate Commerce Commission.

Purchase and sales contracts may result in coordinated effort without the relinquishment of corporate identity. A company which uses or sells the products of another may enter into an exclusive contract. This relation may assure a relatively constant flow of business between the two, lower production costs, reduce or eliminate sales effort, and result in economies. One company may become subordinate to the other, and it is not uncommon for the

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various types. See also H. R. Seager and C. A. Gulick, *Trust and Corporation Problems* (New York: Harper & Bros., 1929), Chapter VII; W. Z. Ripley, *Trusts, Pools and Corporations* (Boston: Ginn & Co., 1916), Chapters I, III, and IV; R. N. Owens, *Owens on Business Organization and Combination* (New York: Prentice-Hall, Inc., rev. ed., 1938), Chapter XVI.

" The European cartel is similar to the pool. It has been defined as "an association based upon a contractual agreement between enterprises in the same field of business, which, while retaining their legal independence, associate themselves with a view to exerting a monopolistic influence on the market." Robert Liefmann, in *Encyclopaedia of the Social Sciences,* Vol. 3, p. 234.

Exemptions from the legal prohibition of combination have been made in the case of labor associations by the Clayton Act of 1914, agricultural cooperative marketing associations by the Capper-Volstead Act of 1922, export associations by the Webb-Pomerene Act of 1918, and railroads by the Transportation Act of 1920, on approval of the Interstate Commerce Commission.

contract to be reinforced by control of one company by the other through stock ownership. Many present subsidiaries of motor and steel corporations were originally related to the parent company solely through purchase and sales contracts.

Less obvious methods have been employed to obtain concerted action by a group of competing corporations. Trade associations formed to study such problems as accounting methods, labor relations, general research, relations with the Government, and price policies have led their members to reach agreements that have greatly reduced or eliminated competition in the matter of prices. Other devices for obtaining harmonious price making have been the basing point price system, which, by using a single shipping point as a basis for price quotations, has made it easier for scattered producers to offer uniform prices; price leadership, whereby the industry follows the prices established by one or a few leading companies; and the "open price" system, which means that prices are posted openly and adhered to rigidly, so that price maintenance is made easy.[16]

Formal combination. The formal types of combination, which involve financial relationships and problems, merit our more careful attention. The trust and the lease will be taken up in this chapter, the merger and consolidation in Chapter 24, and the holding company in Chapter 25.

In choosing among these methods, primary considerations will be taxation, both for the corporations and the security holders of the corporations, the relative ease with which a combination can be effected by the various methods, and legality. All forms, save the trust, which has fallen into disuse for the most part, are employed by railroads, utilities, and industrial corporations. The lease, however, has been used only occasionally and for minor purposes save in the railroad field; the holding company has been used to an unusual degree in the public utility field.

The trust as a method of combination. The trust may be used for centralizing the control of a number of corporations by the transfer of their controlling stock to a board of trustees. The shareholders receive trust certificates showing their interest in the trust. The use of this device to obtain monopoly in the early combination period has led to the popular application of the term *trust* to any combination of companies in the nature of a monopoly.

The trust device was the first formal medium of combination commonly resorted to after the early pooling agreements had proved

[16] For a brief and popular discussion of such devices for corporate cooperation, see Myron W. Watkins, "The Monopoly Investigation: Some Reflections on the Issues," *Yale Review,* Winter, 1939, pp. 323-339. Another popular treatment by an economist is Frank A. Fetter, *The Masquerade of Monopoly* (New York: Harcourt, Brace & Co., 1931).

to be unstable and impermanent. It was designed to centralize control of corporations without forming a new corporation for the purpose or resorting to outright fusion. Controlling stock interests in two or more corporations were turned over to a group of trustees, and the stockholders received transferable trust certificates entitling them to dividends declared by the trustees out of the common fund, while voting power remained with the trustees. Large industrial combinations formed by means of the trust device included the Standard Oil Trust (1879), the Cottonseed Oil Trust (1884), the Linseed Oil Trust (1885) , the "Whiskey Trust"—Distillers and Cattle Feeders' Trust (1887)—and the "Sugar Trust"—Sugar Refineries Company (1887).

But the use of the trust device to effect a combination of companies was soon brought to an end through the condemnation of the courts. In a series of state cases,[17] the courts decided that the trust, when used for controlling the stock of several corporations, was an illegal device not only on the grounds that corporations could not enter into what were in effect partnerships, but also because they generally resulted in monopolies and so were contrary to public policy and illegal under the common law. Some of the trusts, such as the Standard Oil Trust, were reorganized into holding companies, and others were dissolved. But the idea of concentrated control of voting stock in the hands of a top organization was destined to become a leading method of combination through the holding company form, which was first legalized in New Jersey in 1888. The holding company owns the stock of its subsidiaries outright, whereas the trust has legal title only under the conditions set forth in the trust agreement. We shall see in the later chapter on holding companies how this successor to the early trust has fared with respect to the law, and how it has become the controlling device in combinations far beyond the dreams of the early trust makers.

Today the trust device is still very important as a method of placing the control of a single corporation in the hands of a small group of trustees to gain permanency of control or to insure that management will be continued in certain hands after financial reorganization. Such trusts are called *voting trusts.*

Expansion and Combination by Lease

Significance of the lease method. The use of the lease has become an important method by which a corporation may expand its scale of operations without acquiring title to the needed assets. Both as a means of expansion of a single corporation and as a

[17] State v. American Cotton Oil Trust, 40 La. Ann. 8 (1888); People of the State of New York v. North River Sugar Refining Co., 121 N. Y. 582 (1890); State v. Standard Oil Co., 49 Ohio St. 137 (1892).

method of combining the properties of two or more companies for operating purposes, the lease has come to play a significant role in business finance.

It is difficult to state the general significance of the lease in expansion and combination, for there is such a wide variety of lease periods, terms of rental payments, and amounts and types of property affected. Its use ranges all the way from the renting of a store building by the small retailer to the leasing of the property of whole railroad systems. Every lease contract, whether simple or complicated, long or short, involving small or important assets, is essentially an agreement under which the owner (landlord or lessor) transfers the possession of some or all of his property to the user (tenant or lessee) in return for the payment of rent.

Leases fall into three broad classes: (1) the lease of the total operating assets of one corporation to another, which is a case of combination; (2) the lease of individual assets, such as a building or a machine from a landlord or a manufacturer of machinery, which is a means of simple expansion without investment; and (3) the lease which is in reality a device for purchase on the installment plan, title passing to the lessee at the end of the "lease" period. The first form has had its most prominent use in the railroad field, being used only occasionally by utility and industrial corporations. The second type is used by all kinds of businesses, chiefly to minimize or eliminate a large investment in real estate. The third type is chiefly important for the financing of railroad equipment and has been previously covered (pp. 153-159). Installment sales for other equipment are ordinarily made under a conditional sale form of contract rather than a "lease."

Short-term and long-term leases. The short-term lease is characteristic of residential and small business real estate contracts; the use of machinery and equipment is sometimes obtained under short-term lease by small service and manufacturing establishments and by special businesses such as the shoe-manufacturing industry, which leases machinery from the manufacturer. The rent is usually a flat sum, and repairs and maintenance may or may not be taken care of by the lessor. For the small new business, leasing equipment and plant on short terms makes possible the development of the business without a large outlay of funds. The leasing arrangement is especially convenient when expensive machinery, such as that produced and patented by the United Shoe Machinery Corporation and International Business Machines Corporation, is needed by businesses which are not too well financed.[18]

[18] An interesting account of the development of the United Shoe Machinery Corporation and its business of producing and renting patented shoemaking equipment is found in *Fortune,* September, 1933, p. 34.

Short-term leases of real estate are used mainly in the renting of offices, stores, and, less frequently, factories. Because a factory is often difficult to rerent if an original tenant moves out or fails, investors in real estate hesitate to build for rental except in a locality where there are a considerable number of small manufacturers available as potential tenants.

Vacant land is rarely leased for a short term unless only temporary and inexpensive improvements on it are contemplated. Unless a specific "improvement clause" is inserted in the contract, any improvements made by the tenant become the property of the landlord at the expiration of the lease.

The long-term lease is found chiefly in the fields of real estate and railroad operation, although it is used on occasion to acquire utility, dockage, wharf, terminal, and mining properties. In the railroad field, it is an important method of combining properties for operating purposes, and we shall discuss the terms and advantages of railroad leases in some detail. In the real estate field a valuable site may be leased for a long period, and a building may be constructed on it. Very often such a building, if suitable as security, is financed by the sale of leasehold mortgage bonds, which are secured by the leasehold and the building. The income from the rental of the building is expected to cover operating expenses, the rent of the ground, and the interest on the leasehold mortgage bonds and, in addition, provide for the amortization of the bond issue before the lease terminates. Such repayment of the bonds is necessary not only because the building loses value through depreciation and obsolescence but also because all "improvements," such as a building, revert to the lessor of the land when the lease expires, in the absence of any special covenant. Long-term leases of land often run 99 years and sometimes even longer. It is common for buildings in American cities to become valueless through obsolescence long before the lease runs out.

Long-term leases of corporate property are lengthy and complicated documents. They include a complete description of the property leased, the period of the lease, the compensation to be paid, and methods of calculating the rental if it is a variable amount. Long-term corporate leases involving the entire assets of the lessor almost always provide that, in addition to the stipulated compensation, the lessee agrees to pay the lessor's taxes, bond interest, and insurance, and sometimes a sum for the expenses of keeping alive and administering the dormant nonoperating lessor corporation. The short-term lease of equipment by a corporation need not be submitted to the stockholders, but the lease of the whole of the corporation's assets must be approved by the voting stockholders of the lessor.

When the lease runs for a very long period of time, it results

virtually in complete consolidation. Only the shell of the lessor remains. In railroad leases, the most common period seems to be 99 years, although longer terms are occasionally encountered, such as the lease of the property of the West Shore Railroad Company to the New York Central Railroad Company for 475 years, and of a number of small lines to the Pennsylvania Railroad Company for 999 years. The Delaware, Lackawanna and Western Railroad Company has acquired most of its properties under perpetual leases.[19]

The short-term lease of particular assets, such as is employed to acquire building space or equipment, might well be considered as such an ordinary part of normal finance as not to fall under the subject of expansion and combination. Partly as a matter of convenience, however, and partly because the use of such leases does facilitate expansion by providing assets for use without ownership and consequent financing, we shall consider them here.

Leases by industrial corporations. The lease method of acquiring property is used by industrial corporations in a wide variety of ways, of which the following are among the most prominent: (1) the leasing of equipment by manufacturing and service concerns; (2) the leasing of mining and oil properties by extractive corporations; (3) the leasing of sites and buildings by merchants, theater units, and chain stores; and (4) the leasing of land and plant by new or small manufacturing companies.

As we have seen, manufacturing and service concerns may obtain valuable equipment without a large cash outlay by leasing it from the manufacturer on short terms. Much of the shoe-building and shoe-repairing equipment used in this country is leased from the United Shoe Machinery Corporation, which controls the patents. Office equipment, accounting and statistical machines, and other expensive specialized types of equipment are frequently rented in this manner.

In mining leases, the rental may be calculated as a percentage of gross receipts, or, more frequently, at so much per ton of coal or ore extracted, with a minimum annual rental to insure the development of the property. In the oil industry, the customary rental, or royalty, is the value of one eighth of the output.

The chain store and chain theater industries have made extensive use of the lease, the general arrangement being to acquire the site

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[19] Dewing found that, in the era of railroad consolidation prior to 1900, the lease of 50 years was in vogue. Of 205 leases (exclusive of the Pennsylvania and allied lines) in force in 1918, 69 ran from 50 to 99 years and 61 ran from 100 to 1000 years. Later leases seem to have been short term or discretionary; that is, they can be set aside at the discretion of either party. A. S. Dewing, *Financial Policy of Corporations* (New York: Ronald Press Co., 3rd rev. ed., 1934), p. 816, footnote g.

and building on long-term lease or to lease the land and construct the building on it. The advantages of the lease method of control, particularly the saving on capital outlay, may be offset by burdensome terms, and the fixed rent may be hard to bear if revenues decline. This was the experience of the United Cigar Stores Company of America, which went bankrupt in 1932, and the Louis K. Liggett Company, a drug chain, which failed in 1933. The former company was unable to meet its lease contracts after the decline in earnings during the depression. The Irving Trust Company, trustee in bankruptcy, had to reject 700 of the leases before the end of 1932. The drug chain (controlled by United Drug Company, itself a subsidiary of Drug, Inc., which was dissolved in 1933) had such widespread trouble over its leases that a Liggett Landlord's National Protective Committee was formed to obtain voluntary reductions in rent from landlords. But the efforts of the committee failed to save the company, and in 1934 the Liggett Drug Company was formed to acquire its assets.

A development growing out of the depression and a falling price level during the 1930's was the percentage-of-sales lease for merchandising concerns.[20]

The use of the lease by the small manufacturing concern possesses the advantages of saving on capital investment and of flexibility, which varies with the terms of the lease. If the building required does not have to be specialized in type, or the tenant does not feel he will suffer an excessive loss of goodwill by moving, a short-term lease is desirable. When a special building is required, the long-term lease is necessary in order to induce the owner of the land to build a suitable structure. The longer term will also protect the tenant against the losses of moving.

However, the operator may find it advantageous to lease the ground and erect the building himself, financing, if necessary, with an issue of leasehold mortgage bonds. Such bonds are likely to pay a higher rate of interest than those secured by a first mortgage under which the land is pledged as well as the building, because of the risk arising from the prior claim of the leasing landowner to his ground rent over the claim of the leasehold mortgage to interest. In the event of default the landowner could seize the building under the customary lease. A lease of this type is naturally long term and often includes an option that permits the lessee to purchase the ground.

After a building has been erected on leased land, an opportunity may arise to purchase the site. The purchase may be financed by the use of land trust certificates. The title to the land is placed

[20] "Percentage Lease Helps Insurance Company Get Fair Rentals," *National Underwriter* (Life ed.), July 22, 1938, pp. 7-8.

with a trustee, and certificates are sold which represent shares in the trust property and the rent. The sale of the certificates may provide the full cost of the land. The investors who purchase these certificates regard them as much like bonds (as in the case of equipment trust certificates) because their return is a fixed income determined by the rent from the lease. The certificates lack a maturity, however, although they will usually be subject to redemption at a price which resembles the call price of a bond.

When a large investment must be made in specialized property, a separate building corporation may be formed for the purpose of holding the real estate and leasing it to the operating corporation. The building corporation issues its own securities, which are based on the property and the promise of income from the operating company under a long-term lease. This arrangement has been widely used in the department store, office building, and chain store fields, and to a lesser extent by manufacturing companies.

Leases by utilities. In the public utility industry the lease has not been used to any great extent outside of the traction and natural gas groups. Traction grew up at the same time that the steam railroads were being expanded and copied many of the practices of the latter. The use of the lease explains in part the complexity of the financial structure of the traction systems serving New York and Philadelphia. A natural gas property, much like an oil well, might be acquired by lease, and its economics will resemble more closely that of a mining property than that of a utility.

Other branches of the utility industry have used the holding company or outright fusion in their combinations, which will be discussed later.

Railroad leases. The lease has always been an important device for effecting expansion and combination in the railroad industry, especially in the great period of expansion from the later 1870's to the middle 1890's. At the end of 1937, 37,713 miles, or 15 per cent of the railroad mileage in the United States, was owned by 325 lessor companies but operated by other companies.[21] For Class I railroads, rent for leased roads and equipment amounted to 148 millions, or 23 per cent of total fixed charges.[22]

When most of the property of the lessor is operated by the lessee, the rent may include not only the payment of the lessor's taxes and bond interest but also additional compensation, which may be

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"Interstate Commerce Commission, *Statistics of Railways in the United States for the Year Ending December 31, 1937,* p. S-3.

"Ibid., p. S-146. When the lessee acquires the securities of the lessor road, it virtually pays the rent to itself, so that the item of rental in its fixed charges is less important than it would appear. For an explanation of the accounting for this situation, see E. A. Dauer, "A Needed Reform in Railroad Accounting," *Barron's,* February 18, 1935, p. 7.

either a flat annual sum or a variable amount based on (1) the volume of traffic interchanged, (2) a percentage of the gross earnings of the leased line, or (3) a percentage (usually all) of the net earnings of the leased line. The flat annual sum, in dollars, or, as it is usually stated, a certain percentage on the lessor's stock paid directly by the lessee, is by far the most frequent type of arrangement.[23] Under this method, the bonds and stock of the lessor are in effect guaranteed by the lessee.

Under the fixed rental arrangement the effect is much as though the leased property had been bought with a 100 per cent bond issue, thereby giving the advantages and disadvantages of trading on equity to the maximum degree.[24] The result is to convert the contingent dividend charges of the lessor road into a fixed charge of the lessee. This assumption of a fixed burden is sometimes overlooked, because it is not reflected in the capital structure of the lessee, as funded debt would be.

The contingent rental recognizes the variability of earning power.[25] A rental based on the volume of traffic interchanged hardly does more than create a formal relation between two roads, one of which, the lessor, is quite often a small feeder line. Operations are, however, turned over to the lessee. When the rental is a percentage of the gross revenues of the lessor's property, commonly 30 per cent, the arrangement is akin to one based on net earnings but involves an assumption of a constant operating ratio. While less dangerous to solvency than a fixed rental, this arrangement would be burdensome if the operating ratio soared above 70 per cent, as it might in a period of high operating costs. The rental payment based on net earnings would seem to be the most equitable, but it may be unsatisfactory to the lessor in the absence of any control over operations.[26] Most of the original Pennsylvania system leases were of

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[23] Dewing found that the fixed rental has become more and more customary, so that by 1930 only a few leases remained on a contingent basis. Op. *cit.,* pp. 820-821, footnote g.

Thus, as of December 31, 1938, the New York Central operated 6,013 miles of line under fixed rental lease or contract, and only 272 under agreement for contingent rent. *Moody's Manual of Investments, Railroads,* 1939.

Examples of contingent rentals in effect today are relatively rare. A prominent example of the fixed rental is the lease of the Michigan Central Railroad Company to the New York Central in 1930 for 99 years at an annual rental consisting of taxes, organization expenses, interest on bonds, and a dividend of $50 per share of stock (99 per cent of which is owned by the New York Central).

[25] The lines of the Elmira and Lake Ontario Railroad Company, the Freehold and Jamesburg Agriculture Railroad Company, and several other small companies are leased to the Pennsylvania Railroad for 100 per cent of net earnings. The Terre Haute and Peoria Railroad Company is leased to the Pittsburgh, Cincinnati, Chicago and St. Louis Railroad Company for 30 per cent of gross earnings. Both are now operated by the Pennsylvania Railroad Company, which leased the latter road and assumed its lease in 1921.

[26] Such a lease hardly amounts to more than an operating agreement. The

this variety. On rare occasions, a combination of a fixed minimum rental and a percentage of gross or net earnings has been used.

Since it is the common practice in the railway industry for the lessee to acquire the common stock of the lessor, the method of calculating the rental has only nominal importance in many cases.

Effects of the lease on the lessor's security holders. When the stockholders of the lessor corporation lease the company's property under a fixed rental arrangement, they are in effect changed from owners of an operating property to creditors of the lessee, though legally they are still stockholders. Their stock becomes guaranteed stock. They exchange a fluctuating income from the operation of their own property for a fixed income guaranteed by the large corporation. They are relieved of the responsibility of operating their property, and their company's taxes are paid, if that is stipulated. They may also retain the improvements made in the property in case of default or expiration of the lease, unless it is contracted that the value of these improvements, as determined by the terms of the lease, has to be paid to the lessor. The lease can be canceled only by the mutual consent of lessor and lessee or under the compulsion of the receivership or bankruptcy of the lessee.

Since the usual arrangement in corporate leases is to have the lessee pay the lessor's bond interest, the bondholders of the lessor become creditors of the lessee and their interest is payable out of the larger earnings of the system. The various security holders of the lessor company will retain their liens and priorities unchanged by the lease and their corporation will simply return to the operation of its property if the lease terminates or is canceled. The lease would be likely to contain suitable protective provisions to insure that the property is adequately maintained and that the lessee does not build a competing property, so that independent operation of the property would be possible at the end of the lease.

Effects of the lease on the lessee's security holders. The lease device is a simple and quick method of effecting a combination. Control of large properties is acquired without any new capital outlay, and the delays and costs of new financing are avoided. The original investment of the lessee's stockholders controls, and receives the net income from, a larger group of properties. No change in the capital structure is made, and no new corporation has to be formed. Only the consent of the shareholders of the lessor is required. As compared with outright fusion, various costs and delays are avoided.

However, a number of disadvantages may accrue to the lessee.

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operation of the streetcars in Chicago was unified into a single operating system, known as the Chicago Surface Lines, in 1914. Earnings were divided thereafter among the several owning corporations in certain fixed proportions.

The new property is not available as security for new loans in the lessee's name (although the leasehold may be pledged), as would be the case in outright purchase. Improvements may revert to the lessor unless the contract specifically provides otherwise. Complicated leases must be carefully drawn up with respect to the subsequent issuance of bonds by the lessor, payment for improvements and maintenance, and similar problems, or litigation may ensue.[27] The rights of the stockholders of the lessor must not be infringed upon. The leased property cannot be lopped off as easily as property of a subsidiary corporation, especially under a long-term lease. The expenses of maintaining the separate lessor corporation as well as Federal income taxes on its net income must be paid—a penalty for keeping the lessor alive as a corporate entity. A major disadvantage of the lease arrangement is that there are difficulties in financing additions and improvements to leased property. The lessee must write off the cost of any such improvements during the life of the lease unless they are to be paid for at the expiration of the lease, and in the latter case valuation may be a complicated and contentious process. Most important of all, the rent, in the case of the usual fixed rental arrangement, constitutes a fixed charge which must be met whether or not the addition of the lessor's property turns out to be profitable.

To overcome some of these disadvantages, most lessees in the railway field acquire at least the voting control of the lessor, in order to avoid trouble over the terms of the lease, to make the association permanent, and to pave the way for merger should that appear desirable at a later date. Such an investment in the stock of the lessor offsets, in part, one of the main advantages of the lease —that it requires no financing to gain the use of the property. But this stock acquisition may be carried out leisurely after the lease has been arranged.

If the earnings of the lessee are increased as a result of the combination of the properties, the lessee's bondholders are benefited in that the earnings protection to their interest is increased. On the other hand, the total fixed charges of the lessee are increased, and in the case of declining earnings, the additional burden of fixed charges may lead to insolvency.

Effect of the lease on the lessee's capitalization. The addition of a fixed rental charge to the total fixed charges of the lessee has the same effect as increasing the proportion of debt to stock in its capitalization, although no new debt appears on the balance sheet.

[27] Occasionally, as in the case of such roads as the Michigan Central Railroad, which is leased to the New York Central, provision has been made for the financing of improvements by increasing the debt of the lessor. A long-term lease would be likely to permit the refunding of any of the lessor's bonds maturing before the expiration of the lease.

For this reason, in comparing the capital structure of two railroad companies, it is necessary to take the rent charges into consideration; otherwise a distorted picture of their financial position is obtained. Thus, the Delaware, Lackawanna and Western operates 966 miles of line but owns only 244 miles; the rest is leased. Its only direct funded debt consists of a small amount of equipment trust certificates, but its rent for leased lines, in 1938, amounted to $7,452,000. The road should be figured to have the equivalent of funded debt to the amount of the guaranteed stocks and bonds of the leased lines, totaling $155,500,000, plus its equipment trust certificates ($3,700,000). Substantially the same result would be obtained by treating as funded debt the rentals capitalized at 5 per cent, which would amount to $150,000,000.[28]

"Analysts of railroad securities compare the capitalizations of different roads by adding to the stocks and bonds an amount to represent the fixed rental charges. The latter amount is obtained by capitalizing the rentals at some arbitrary rate, such as 5 per cent, and the resulting figure is regarded as equivalent to funded debt.

CHAPTER 24

MERGERS AND CONSOLIDATIONS

Types of Fusion

Meaning of merger and consolidation. A *merger* occurs when two corporations are fused, one of which survives, while the other loses its corporate existence and has its properties combined with those of the company which remains. Fusion through *consolidation,* or *amalgamation,* as the process is sometimes termed, involves the formation of a new corporation and the transfer to it of the assets of the constituent companies, both of which lose their separate existence. In popular usage these terms are often employed interchangeably and loosely to cover any fusion, including a sale of assets by one company to another.

In the strict legal sense, mergers and consolidations are effected only through specific statutory proceedings whereby the company absorbed in a merger or the constituent companies in a consolidation automatically lose their identity in the surviving or new company, which acquires their assets and assumes their obligations. Fusion may, however, be accomplished by the more roundabout process of sale of the assets of the merged or consolidated companies, or by the setting up of a holding company-subsidiary relationship, followed later by dissolution of the companies which are to disappear. In financial parlance, a merger or consolidation is said to have taken place, although the process followed is• not that of a statutory merger or consolidation.

Types of mergers. Thus, while every "merger" results in the absorption of the properties of the selling company by the buying company, the steps whereby this result is obtained may differ from case to case:

1. *Sale of assets.* One company, *A,* may buy all or part of the assets of another company, *B.* The purchase may be for cash or for securities issued by the purchasing corporation. The price may cover the net assets only, the selling company assuming liability for any claims which had existed. Any mortgage liens follow the property pledged. Company *B* may survive as a separate corporation, but it is a mere shell, and, after any creditors not cared for by the buying corporation are paid, and the cash or securities received for

its assets are distributed to its stockholders, it is logical for it to dissolve. If the purchase is made with securities, these may be kept as assets, in which case the selling company survives as an investment or holding company.

2. *Holding company and dissolution.* The purchasing company, *A,* may find it more convenient first to purchase *B's* stock, becoming a holding company for *B,* which continues to exist as a separate corporation. Complete fusion may then follow at a later date, when A dissolves *B* and obtains its assets from the liquidation. The ultimate effect is the same as in the preceding arrangement, but it may have the advantage of bringing Company *B* under control more quickly and with less difficulty than through the direct purchase of assets.

3. *Statutory merger.* The stock of *A* may be issued to the owners of Company *B* instead of to the corporation under an agreement whereby A acquires all the assets and assumes the liabilities of *B,* and *B* automatically disappears as a legal entity. This arrangement may be called *statutory merger,* to distinguish it from the purchase of assets and purchase of stock methods, which do not automatically result in complete fusion. Shares of the surviving corporation are issued to the shareholders of the other company in proportion to their relative contribution to the combination. The corporation law of the particular state stipulates the procedure to be followed and the rights of the various groups which are involved.

Merger by Sale of Assets

Procedure for purchase of assets. [1] In some respects merger by purchase of assets for cash is the simplest method of fusion. When the boards of directors of both companies have passed upon the proposition, it must be submitted to the stockholders of the selling company only (unless raising the cash necessitates the sale of securities that require authorization by existing security holders of the buying company). Under the laws of the 40 states permitting the sale of entire assets, the approval of a proportion of shareholders

[1] The purchase of the assets of one corporation by another may be carried out for purposes other than to effect a merger of properties. A new company may be formed to acquire the assets of an old company in order to convert from a family or closely held business to a publicly financed business; the earnings of the old company are capitalized, and a new company is formed to offer securities to the public. Such conversions of successful companies into ones more satisfactorily capitalized for a public offering were characteristic of the period 1926-1929, when investment bankers sought new sources of securities to be sold in the avid stock market and profited from the sale of these securities and from the shares in the new company which they received for their promotional services.

Sale of assets is also a feature of corporate reorganization, wherein the assets of the reorganized company may be sold at foreclosure sale to the representatives of the majority, as described in Chapter 28. Sale of assets in bankruptcy is another nonmerger type of transaction.

ranging from a majority to four fifths is required.[2] The selling company conveys the properties to the buyer for the agreed consideration, and the transaction is complete. The seller can then pay off its creditors, distribute a liquidating dividend to its stockholders, and go through the formal process of dissolution, as described in Chapter 29.

Valuation of the property to be transferred. Whether all or a part of the assets of the selling company are to be acquired, the problem of valuation is involved. An inventory of the assets to be transferred is drawn up, and the representatives of the companies concerned, often with the aid of an outside appraiser, reach an agreement as to their value. Current assets are usually appraised at what they would bring if they were liquidated in the ordinary course of business, except that the final profit to be realized when inventory is sold is excluded, and the value of the inventory is taken at current cost of replacement. Fixed tangible assets are ordinarily carried on the books at cost less depreciation, and such figures may be carried over on the books of the purchaser, but their valuation would be made at the cost of replacement less depreciation.

The valuation of the intangible assets—patents, copyrights, franchises, concessions, and goodwill—will be the amount by which the present value of the business as a going concern, on the basis of estimated future earnings, exceeds the inventory of tangible assets. A common procedure in valuing a business is to capitalize the *past* earnings of the business, for a period of both good and bad years, at the rate earned on investments in similar enterprises. Capitalization rates are found by studying the relation existing between *past* earnings and the market value of the securities of similar concerns.

If the total value of the business found by this capitalization method exceeds the valuation of the operating tangible assets, the excess is regarded as the value of the intangible assets. When the total value is less than the sum of the current replacement value (less depreciation) of the several operating assets, the vendor corporation might reasonably sell out at this lower figure, because the business is only worth what it can earn for its owners, except, however, that they will not accept less than they can obtain by liquidat-

[2] For example, the Illinois Business Corporation Act (1937) contains the following stipulation with respect to the sale, lease, exchange, or mortgage of assets, other than in the usual and regular course of business: "Such authorization shall require the affirmative vote of the holders of at least two-thirds of the outstanding shares entitled to vote at such meeting, unless any class of shares is entitled to vote as a class in respect thereof, in which event such authorization shall require the affirmative vote of the holders of at least two-thirds of the outstanding shares entitled to vote at such meeting" (Sec. 72c).

This provides for block voting by the preferred stockholders, who, if the charter so provides, may thus veto a proposal even when it is approved by the owners of two thirds of the common stock.

ing the assets in the open market. Liquidation of the separate assets would imply that they have no extra value when taken together as a going concern. This secondhand value of assets may be considerably lower than replacement cost less ordinary depreciation, because of the costs of selling and the lack of a well-organized market.

While a well-informed vendor will not be expected to sell his assets for less than they are worth to him either as a going concern or a liquidating proposition, whichever is greater, he may be able to obtain more. To the purchaser the properties are worth a figure that represents a capitalization of the earnings that he expects to make them yield. Either because of his belief in his superior skill or in the advantages growing out of combined operation, he may arrive at a value well in excess of what the business is worth to the vendor. A sale will take place at some figure between the value of the assets to the vendor and that to the purchaser.

Other problems concerning value will be considered in the discussion of mergers below.

Dissenting stockholders in a sale of assets. Under the laws of most states, stockholders who dissent from the proposed sale are entitled to the fair cash value of their shares as of the date prior to the day on which the vote was taken authorizing the sale. In case the dissenting shareholders and the corporation cannot agree on this value, they are entitled to the valuation determined by the court or by appraisers appointed by the court for that purpose.

Whenever the court agrees with the dissenting stockholders that they should obtain more than is to result from the sale, the extra sum comes out of the shares of nondissenting stockholders, since such an agreement cannot alter the terms of the sale. In order to avoid the risk of an undue burden being placed on the majority by dissenting stockholders, the directors may reserve the right to cancel the sale until after the period has elapsed during which dissent must be registered.

Rights of creditors in a sale of assets. Unless the sale brings in less than the liabilities, only the stockholders of the selling corporation are affected by the price set. If the specific liens on the property of the selling company are not paid off, they continue in effect and the buyer must continue payments to avoid seizure under foreclosure. Probably the most common practice is for the purchaser to assume the long-term or funded debt of the vendor but have the vendor care for other indebtedness. However, the purchasing company does not assume the liabilities of the seller unless there is an agreement to that effect, or unless the purchaser has failed to give appropriate notices to creditors. In the latter case, the Bulk Sales Acts of most states provide that the buyer may be

held liable by the seller's creditors up to the value of the assets he receives. These laws are designed to prevent transfers that would permit owners to dispose of assets and make away with the proceeds, thus perpetrating fraud upon the creditors.[3]

Purchase of assets with securities. In cases where the assets of the selling company are exchanged for securities of the buyer, the procedure, in so far as questions of approval and legality are concerned, is similar to that for cash purchases, unless the approval of stockholders of the purchasing company is required for an increase in authorized capitalization. The selling company ordinarily distributes the securities received for its properties to its own stockholders and then is dissolved. If the selling company retains the securities and remains in existence, it continues as a holding company or as an investment company.[4]

As compared with the sale for cash, the sale for securities may be advantageous in cases where the securities might not be readily salable at the time. However, when the purchasing corporation is large enough and the security markets are propitious, the deal may be worked out in collaboration with an investment banker, who may agree either to purchase the issue from the buyer or the vendor corporation or to purchase the stock of those stockholders of the vendor corporation who prefer cash to securities. While some stockholders may prefer cash, a sale for stock may result in a saving of income taxes to the vendor corporation and, in case of the dissolution of that company, its stockholders. In a cash deal a completed transaction, upon which a profit or loss may be realized, has taken place; in a stock transaction the investment may be deemed a continuing one upon which no gain or loss has been registered, if the sale is carried through according to the terms set forth in the Revenue Act.[3]

The sale of the assets (or a merger) may be the only way for owners of businesses who are unable (as in the case of some heirs) or unwilling (as in the case of aging executives) to continue operations to obtain a fair price for their business as a going concern and

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[3] "The courts are quick to give relief in any situation where one corporation takes over all of the assets of another, leaving the latter a mere empty shell, with no provision made for payment of its creditors. In such a case, the transferee will generally be held liable to the creditors of the old corporation either on the theory of a fraudulent transfer, or a 'trust fund' or 'equitable lien' theory, or by finding an implied assumption of liability." W. J. Grange, *Corporation Law for Officers and Directors* (New York: Ronald Press Company, 1935), p. 593.

Thus, when the Adams Express Company sold its properties in 1918 to the American Railroad Express Company for stock of the latter company, it continued in existence. The stock received was gradually shifted into other securities, and today the company is one of the largest investment trusts.

Nor are taxable gains or losses incurred when a company absorbs a subsidiary of which 80 per cent control is owned.

avoid the losses of liquidation. When a corporation has not been successful, its owners might hesitate to admit their loss by a straight cash sale. However, they might be willing to accept stock of a more successful corporation that had no greater market value than the fair cash value, because they could hope that the stock would appreciate, while the acceptance of cash would register an unequivocal loss.

One advantage in the sale for stock over that for cash is that the negotiators do not have to agree upon a definite dollar valuation of assets being sold. It is necessary merely that the directors and the stockholders of the vendor corporation be convinced that their position will be improved by the exchange. Some of the problems and influential factors will be developed more fully in the following sections, which are devoted to merger and consolidation, since these types of combination are almost invariably effected through an exchange of securities.

Most cases of this type involve the exchange of stock for assets, as, for example, when American Rolling Mill Company acquired the assets of Calco Iron Pipe, Ltd., for 71,494 shares of common stock in October, 1935. The selling company was subsequently dissolved. A more complex arrangement, involving senior securities, is illustrated by the sale of assets by the Corrigan-McKinney Steel Company to the Republic Steel Corporation in September, 1935. The latter company gave for the assets of the former $15,361,000 purchase money, first 51 per cent bonds, 27,929 shares of 6 per cent prior preference stock of $100 par, and 698,223 shares of common stock. Upon dissolution of the former company in December, 1935, its shareholders received, for each share held, $11 principal amount of bonds, $2 par value of preference stock, and one-half share of common.

Advantages and disadvantages of "sale of assets" fusion. The "sale of assets" has the advantage of the merger, as compared with the consolidation, in requiring only the consent of the statutory percentage of the vendor corporation's stockholders. Like the merger and unlike the consolidation, fusion by the sale of assets does not require the formation of a new corporation. When the two corporations involved are chartered in different states, the sale of assets may be the simplest method of combination. In fact, it may even be the only way to avoid an outright prohibition of statutory merger or consolidation with a foreign corporation.

When assets are being sold, it is also easier to arrange for a sale of a part rather than all of the assets. If the purchasing corporation has available either cash or authorized but unissued securities, no action is required of its stockholders. It is apparent that a sale of assets is different from a merger chiefly in certain technical

aspects. The two have much in common, since they both result in a complete fusion of two business units under the single corporate tent of one of the pair.

Merger by Holding Company and Dissolution

Fusion preceded by stock acquisition. Either a "sale of assets" or a merger may be preceded by a period during which one of the corporations has built up a controlling interest in the other by the purchase of stock. When this process has gone so far as to give the controlling company all or almost all of the stock of the other, the transfer of assets may take place simply by dissolving the subsidiary and turning over its assets as a liquidating dividend.

This method is most likely if the minority interest is either very small or nonexistent, and if there are no complicating debts or preferred stocks likely to create a need for cash. Any minority interest stockholders might create a problem because they would necessitate a valuation of the total properties to determine their share in the liquidation and the presence of cash to pay off that interest. Similarly, senior obligations might make it necessary to provide cash to care for their interest before distribution and dissolution could be effected. Liquidation might also create gains or losses that would not be present in the other forms of fusion, and these changes would affect the income taxes of the holding company.

During the interval between the acquisition of the controlling interest and final fusion through dissolution, the relationship be-. tween the two corporations would be that of holding company and subsidiary, which is discussed in the next chapter. The interval could be a probationary period during which the holding company could decide more accurately as to the advantages of coordinated activity before a complete fusion, which is extremely difficult to unscramble, had been effected.

Since a corporation might hesitate to make a cash investment in another corporation that it did not control, the initial step is often a purchase of working control, which is sometimes a large minority interest, from the dominant stockholders. Such a purchase could be either for cash or securities, whichever was more convenient and economical. Additional stock could be either bought in the open market for cash or acquired by making a public offer to exchange stock of the holding company for stock of the subsidiary.

The initial step might involve a number of corporations seeking to unite under a holding company and resemble a consolidation. Important stockholders or directors work out a plan for the exchange of securities by the companies involved for those of a new corporation, which would be the holding company. The plan is announced. If a sufficient number of stockholders consent by depositing their

certificates with a trustee, the plan is declared operative and the exchange is put into effect. If, however, an insufficient number of deposits are obtained, the stock certificates are returned and the plan is declared inoperative. After the formation of such a holding company, complete fusion might be effected by a sale of assets, dissolution, or merger of any given subsidiary.

Statutory Merger and Consolidation

Meaning of statutory fusion. In each of the methods of fusion discussed thus far in this chapter the constituent companies retain their separate identity until they are formally dissolved. However, the laws of the various states provide for direct fusion by special statutory proceeding. Under these laws a merger of one company with another, or a consolidation of two or more companies into a new corporation, automatically results in the cessation of the separate existence of the constituent corporations, except that of the surviving corporation in the case of a merger, and the new corporation in the case of a consolidation. These surviving corporations enjoy all the rights, franchises, and privileges formerly possessed by the constituent companies. This procedure is called *statutory merger or consolidation,* and, to be legal, it must be carried on under the provisions of the corporation laws of the state. The statutes of most states now contain provisions setting forth the procedure for such fusions. In some states, only domestic corporations may combine; others permit the fusion of domestic and foreign corporations.[6] If the constituent companies were incorporated in different states, the consent of the states concerned must be obtained.

Procedure of statutory merger and consolidation. While the laws vary somewhat from state to state, the procedure is generally as follows:

1. The directors of each constituent corporation pass identical resolutions containing the terms of the merger or consolidation and the method and basis of exchange of securities, and direct that the plan be submitted to a meeting of the shareholders.
2. At a meeting of the stockholders (usually a special meeting)

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a "At first the privilege (of merging and consolidating) was usually extended only to such corporations as were engaged in the same or similar business, but today this restriction has largely disappeared save in connection with public utility corporations, insurance companies, and banks and trust companies. At the present time, thirty-three states have what might be called general statutes authorizing merger or consolidation, or both, while in the remainder of the states a special act would still be necessary to effect this type of combination. Of those states having general merger or consolidation statutes, thirteen seem to confine the powers to mergers or consolidations of domestic corporations of other states. At least three of these require that the surviving or consolidated corporation shall be a corporation of that state only." "Statutory Merger and Consolidation of Corporations," *Yale Law Journal,* November, 1935, p. 110.

the plan is submitted for approval. Most states require a two-thirds majority of stockholders entitled to vote on the question; some require as much as three-quarters, and others require only a simple majority.

3. Upon approval, duplicate articles of merger or consolidation, setting forth the plan of combination, are filed in the appropriate office of the state. If the office (usually the Secretary of State) finds that the articles conform to law, after the necessary franchise taxes and fees are paid, a certificate of merger or consolidation is issued, and the merger or consolidation is complete. No instruments of conveyance, such as deeds or bills of sale, are necessary. Not infrequently, mergers and consolidations of public utility corporations must have the approval of the public service commissions of the states involved. Fusion of railroad corporations requires the approval of the Interstate Commerce Commission.

The new or surviving corporation has all the rights, privileges, franchises, and assets of the constituent companies and is liable for their obligations. Neither the rights of creditors nor any liens on the property of the constituents are disturbed.

Rights of dissenting stockholders. Dissenting stockholders in either a sale of assets or a merger may seek to block the fusion by asking a court to enjoin the action either because the sale price is inadequate or because the exchange of securities is unfair or fraudulent.[7] Other grounds may be that the action was not properly authorized either by directors or by stockholders, that it was *ultra vires,* or that there would be a violation of some law, such as the antitrust laws or anti-stock-watering laws.[8] The stockholders may, however, merely seek a better price and sue for the value of their stock interest in the constituent company. If a voluntary valuation cannot be agreed upon, the normal procedure is to have their shares appraised by the court, or, in some states, by special appraisers selected for the purpose.[9] Upon payment of this value, the shares are transferred to the issuing corporation and canceled.

[7] Frequent claims of dissenters are (1) that the terms of the plan of exchange give preferential treatment to the stockholders of one or more of the constituents over those of the one in which the complainant holds stock, thus diluting his equity and control; (2) that one class of stockholders within a constituent corporation is given preferential treatment over the class of which the complainant is a member, with corresponding dilution; (3) that the agreement calls for the surrender or diminution of some special right, such as priority as to assets, voting rights, or call features in preferred stock. *Ibid.,* pp. 116-120. (This reference cites a large number of cases involving suits to set fusions aside.)

[8] David L. Dodd, *Stock Watering* (New York: Columbia University Press, 1930), p. 36.

[9] An excellent treatment may be had in James C. Bonbright, *The Valuation of Property* (New York: McGraw-Hill Book Company, 1937), Chapter XXIV, "Valuation in Dissenting Stockholders' Suits." For further references, see p. 826, footnote 32, of that work.

Financial Problems in Mergers and Consolidations

Turning from the legal procedure of merger and consolidation, we must examine several important questions of a financial nature: Who does the work of arranging and carrying the combination through to completion? How is the plan of merger or consolidation determined, and what factors determine the basis of exchange of securities? What are the effects of the fusion on the owners and creditors of the companies concerned? While the law lays down the legal procedure which must be followed, the financial technique varies from case to case.

Work of the promoter. We have seen that the first step in the procedure of statutory merger or consolidation is the passage of the resolution by the directors of the constituent corporations. While this is the first legal step required, behind it lies the whole process of bargaining which leads up to the agreement between the fusing companies as to the terms of exchange of securities. The steps in the promotion of a merger or consolidation are similar to those in the promotion of a new enterprise—someone conceives the idea of the combination; the profitability of the idea is investigated; and the financial plan is worked out and presented to the interested parties. However, in the final step there may be no need in a fusion for new funds or the sale of securities. A simple exchange of securities may suffice. Very often, however, securities will need to be sold to pay in cash any dissenting stockholders or stockholders who have consented on the understanding that they would get cash; to realize on securities given the promoter; to refund old securities or pay off liabilities; and sometimes to provide new funds for working capital or plant rehabilitation and expansion.

The promotion of mergers and consolidations may take place from the inside or from the outside. Inside promotions are those conducted by the management or representatives of one or more of the constituent companies, who take the initiative in suggesting the fusion and in bargaining with the other corporations. Promotions from the inside are confined largely to fusions of related concerns, such as of a holding company and its subsidiaries or of companies in which stock is held by the same parties, known as a *community of interest.* The promotion of mergers of unrelated concerns is often arranged by outsiders—either professionals or investment bankers—who can take a neutral position in the bargaining between the constituent companies and can command more confidence than the interested representatives of any one of them.

The outside promoter who conceives the idea of the fusion has at least two methods of approach. In the so-called *bargaining* method, he estimates the possibilities of the companies to be combined and then negotiates the acceptance of securities in such a

manner that a portion is left for him as compensation for his promotion services. In the *option* method, the promoter secures options on the assets of the several companies, contracting to take up the options within a stipulated period. A new company is then formed, or the surviving company is recapitalized, and securities in the new or surviving company are offered to the selling companies. The difference between the amount of securities necessary to attract the selling companies, and the total capitalization, constitutes the reward of the promoter.

When an investment bank takes the initiative in promoting the fusion, it may benefit from the transaction in several ways. The new consolidated company or the surviving company is capitalized to give effect to any savings expected to result from the fusion, and, after securities are allotted to the owners of the constituent companies, those which represent most of the savings may be retained by the bank. In addition, the promotion may involve the sale of new securities to the public, in which case the bank obtains the underwriting or selling commissions.

From the standpoint of the corporations which are involved, the investment bank may be the best medium of promotion. The bank has the staff and facilities to make a thorough evaluation of the assets and earnings of the constituent companies, which evaluation forms the basis of the plan of exchange of securities. If new financing is required, it is in a position to judge the state of the market and to determine the types and prices of securities which will be acceptable to the market. It can deal with dissenting or indifferent security holders, underwriting their acceptance of the plan and paying them off in order to avoid a forced appraisal. (The dissenters have the right to demand an appraisal, but they may be persuaded to accept cash or securities.) Finally, the connection with prominent banking houses lends prestige to the transaction and to the enlarged corporation.

One of the most important tasks of the promoters of a merger or consolidation is to prevent the formation of dissenting groups, for, once formed, such groups may be able to impede the progress of the arrangement or even prevent its completion. If the surviving or new corporation can purchase the entire stock of the company to be merged or consolidated, the remaining procedure is simple. Under some state laws, such as that of New York, a holding company may absorb its subsidiaries merely by filing a properly drawn certificate. No action of the directors of the subsidiaries is necessary, and no meeting of the stockholders of any of the corporations is required. The parent corporation automatically succeeds to all of the assets and assumes all of the liabilities of the merged subsidiaries. But when less than 100 per cent is acquired, care must

be taken not to prejudice the interests of minority stockholders, for these may be able to enjoin the fusion, or at least may insist on being paid off at the appraised value. The problem may be avoided by expert negotiation, or, as a last resort, by buying out the recalcitrants.

Most proposed mergers and consolidations never go beyond the first stages of promotion. While the idea of fusing two or more companies in the same field may occur to many persons within and without the organizations, the investigation—if the promotion reaches that stage—may reveal a disappointing outlook as far as profits are concerned. Or the individuals connected with the separate companies in an executive capacity may be unwilling to relinquish their preferred positions and take a less conspicuous place in the larger unit. Or, in spite of the recognized possibilities of a proposed merger or consolidation, the condition of the securities market and the general business outlook may be such as to cause the promoters to wait for a more favorable day. The need for favorable conditions explains why the last great period of mergers and consolidations ended with the boom of the 1920's.

Basis of exchange of shares. In the preparation of the agreement of merger or consolidation, whether conducted as an inside or an outside promotion, the main problem is to determine a basis for the exchange of shares which properly reflects the contribution of the stockholders of the constituent companies to the new or surviving company and guards their balance of control. The next problem is to induce the stockholders of the constituent companies to come in on that basis. The final plan or agreement is often the result of an extended period of bargaining and compromise, and even then there may be dissenting shareholders to be dealt with.

The basis for exchange will be conditioned by three factors. The first will be the value of each business to its stockholders as a continuing independent enterprise. (Ordinarily, the bondholders have no voice in the decision, and their obligation is quite often assumed by the new or surviving corporation.) Presumably stockholders acting on self-interest would not take anything of less value than this amount, and the inducement to participate would be the hope of something more. The second will be the amount of their contribution to the combination, which presumably will be a higher figure than the first because of the expectation of the increased earnings due to larger-scale operation, the diminution of competition, or the bringing of a property under more efficient management. Since such profits grow out of the fact of combination rather than any special merit of either company, it may be difficult or impossible to allocate it as the "contribution" of either. The allocation of the gains of combination will be the result of the third factor-

namely, the bargaining of the corporations' or the security holders' representatives. Since such increases in values are highly uncertain, the bargaining parties may choose to ignore them in determining the securities to be allotted and base their calculations on the first factor, which consists of relatively demonstrable values. In that case they are sharing the "combination" profits in the ratio in which they agree to share residual earnings—that is, in proportion to the common stock allotted to each.

Determining the capitalization of the new company. In the pre-War period and before the advent of stock without par value, the dollar amount of capitalization was the center of attention. The problem was regarded as one of determining for the full worth of the combining businesses a valuation that would include not only the developed goodwill but often the value expected to develop from the enhanced profits after combination. This valuation would then determine the amount of securities to be issued.

Suppose that two corporations with net tangible assets, after liabilities, of $5,000,000 were showing earnings of $600,000 and that these earnings were expected to mount to $750,000 after fusion. If a "normal" return were deemed to be 10 per cent for this type of business, the valuation of the business would be $6,000,000 on the basis of existing earnings and $7,500,000 on the basis of anticipated earnings. With tangible assets of $5,000,000, the difference between that amount and the total valuation would be attributed to goodwill. The goodwill already developed would amount to $1,000,000 ($6,000,000—$5,000,000) ; its anticipated value would be $2,500,000 ($7,500,000 —$5,000,000). On this basis the accounts of the consolidated companies would be set up to show the tangible assets and the larger goodwill figure. Stock with a par value would be allotted to the participants, some possibly going to a promoter.

The published balance sheet of the consolidation has not always reported clearly the amount of goodwill included. Often the amount was lumped in with the plant and equipment—sometimes without any indication in the account title that intangible items were included. While this picture might be thought of as fitting only industrial consolidations in the era preceding the regulation of their accounts, railroads and utilities were not unaccustomed to these revaluations. Sometimes a valuation for intangibles was set forth as "Franchises"; more often the Property account was written up.

Overcapitalization. When, as a result of promotional optimism, the total par value of securities issued is so great that earnings fail to make the business worth the amount outstanding, a state of overcapitalization is said to exist. A simple test for overcapitalization would seem to lie in a comparison of par value with market value; if the latter is lower, the amount of stock issued would appear exces-

sive. But the extreme fluctuations that commonly characterize the price of listed stocks mean that this test will give varying and uncertain results. Moreover, it would stigmatize as "overcapitalized" many corporations without a penny of intangibles on their ledgers and with all their tangible assets conservatively stated at cash cost less depreciation, simply because of a failure to produce adequate earnings. Since the term *overcapitalization* has a connotation of wrongdoing for many, it should be employed with care.

A major disadvantage of excessive security issues is that their poor record: may be an obstacle to later financing. [10] The failure of a common stock to sell at par may be remedied with relative ease by having the par value reduced or eliminated by action of the stockholders, but, while excessive debt or preferred stock may not be bad enough to cause a reorganization, it may so cloud the financial record that financing or the offering of securities to acquire other businesses will be difficult or impossible.

Much of the discussion of overcapitalization and undercapitalization represents an excessive and misplaced emphasis upon par value and sometimes a feeling that par value should correspond with market value. The development of stock without par value or with a nominal par has done much to change this attitude. Emphasis, in so far as its rests on the balance sheet, should be upon the asset side. Regulation under the Securities and Exchange Commission, which requires a disclosure not only of accounting methods but also of valuation methods, is a healthy influence in this direction. Standards set up by the Commission are likely to influence practice even in the case of securities that are not registered with it.

The abandonment of par value for the common stock does two things: It makes unnecessary any elaborate computation for the value of goodwill to be set up in the accounts, and it fastens attention upon the earnings and their division among the participants by the plan of combination. Because it is regarded as "conservative" practice, the avoidance of substantial goodwill in the balance sheet is felt to be an advantage by many. The danger of overcapitalization and the disadvantages mentioned above are greatly reduced.

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[10] The supposed disadvantage of investor deception probably exaggerates the importance of par to the investor, as suggested in a later paragraph. The argument that overcapitalization causes corporations to charge the public excessive prices in order to pay a return on the excessive security issues shows an ignorance of the price-making process that any student of elementary economics should be able to explain away. Even when the excessive securities are in the form of bonds, their fixed charges are no support to high prices. The numerous railroad and real estate receiverships of the last decade should serve as an object lesson. A chief trouble with heavy fixed charges is that they are likely to cause a weak corporation to scrimp on maintenance in order to- avoid- receivership.

The watered-stock hazard, with the possibility of stockholders' liability for failure to pay par value in full, is also avoided. In some states—oddly enough, in some like Delaware and New Jersey, which are relatively easygoing in many corporate matters—decisions may be found that goodwill based upon anticipated earnings (as distinguished from that resulting from past earnings) is not "property" and therefore not a valid consideration for exuberant stock issues.[11]

Illustrative consolidation; senior obligations. An illustrative consolidation may be examined to see how the combination might be handled both with common stock having par value and with common stock without par value. The following figures show the main points about assets and earnings for two corporations, *A* and *B:*

	A	
Net Current Assets	$ 450,000	$ 550,000
Tangible Fixed Assets (after adjusted depreciation)	1,000,000	3,600,000
Total...	$1,450,000	$4,150,000
Funded Debt	.....	400,000
Preferred Stock ($100 par)	200,000	.....
Common Stock ($100 par)	1,000,000	2,500,000
Surplus	250,000	1,250,000
Adjusted Average Net Income Available to Common Stock, Past 5 Years	300,000	400,000
Estimated Savings of Consolidation	$70,000	

The initial step is to decide how the obligations senior to the common stock shall be handled. Bonds may be either assumed or paid off in cash. Probably the more common procedure is to leave funded debt undisturbed and have it assumed by the successor corporation. If the bonds pay a high enough interest rate, are callable, and are of sufficient amount to make the step worth while, the successor company will refund. Refunding is also likely if new bonds are being offered to increase working capital or for other corporate purposes. The elimination of old bonds makes the new issue a first claim on all property and utilizes the prestige of the expanded corporation.

Preferred stock may also be redeemed if it is callable, but otherwise, as an ownership interest, it will have to be exchanged for securities of the successor corporation. Frequently the offer of a preferred stock with the same dividend rate and similar provisions in the enlarged company is sufficient. The dividend rate may even be lowered if the management is prepared to call and pay cash for any preferred stock whose holders are unwilling to accept the ex-

[11] Bonbright, *op. cit.,* p. 217.

change. The occasion may be used to simplify capital structure by offering a conversion of preferred into common, or the alternative of either preferred or common might be offered. Since the type of investor which buys preferred may not care to acquire a common stock, it will generally facilitate negotiation if no attempt is made to force an exchange into common, unless the preferred in question has already acquired a speculative character through a fluctuating dividend record.

In the following illustrations, the simplest solution will be assumed—namely, that the bonds of *B* are assumed and A's preferred stock is given a similar new preferred in the consolidated company. In the first illustration, common stock with par value will be used, and goodwill will be set up on the basis of anticipated earnings as well as earnings already demonstrated.[12] If 10 per cent earnings are necessary to attract common stock investors in this type and size of business, in which the net income is subject to moderate prior charges such as are shown here, then the value of the common stock equities is the value of a $770,000 ($300,000 + $400,000 + $70,000) income capitalized at 10 per cent, or $7,700,000. This figure compares with a combined common stock equity based on tangible assets of $5,000,000 and gives a valuation for goodwill of $2,700,000. Set up in condensed balance sheet form, the consolidated company would show the following:

ILLUSTRATION I. CONSOLIDATED *AB* CORPORATION

Current Assets (net)	$1,000,000	Bonds	$ 400,000
Fixed Tangible Assets (net)	4,600,000	Preferred Stock (par $100)	200,000
Goodwill	2,700,000	Common Stock (par $100)	7,700,000
	$8,300,000		$8,300,000

An objection might be raised to this method of goodwill valuation, which is obtained by capitalization of net income available for the common stock. The conventional approach is to value the business as a whole by capitalizing the income before interest and dividends. The financier or promoter who approaches stockholders with a consolidation plan, however, must offer them values that appear attractive in relation to their valuation of their particular interest in the business. He cannot use a valuation made by taking the business as a whole and subtracting either the par or the market value of senior securities. The use of bonds and preferred stocks creates the peculiar phenomenon of a business being worth an amount different from the sum of the values of its several security issues. Furthermore, the total value of the capitalization may be varied by altering the proportions of the several kinds of security.

[12] Note the danger that such goodwill might not be deemed legal consideration for the issue of stock in some states. See preceding footnote.

Because of such controversial aspects of goodwill valuation, as well as the ever-present basic difficulty of determining how future earnings are to be estimated and what rate of capitalization is appropriate, the alternative procedure of ignoring goodwill in the accounts is likely to be regarded with relief. The elimination of goodwill also has the advantages suggested above. A balance sheet for the *AB* consolidation, showing tangible assets only and no-par shares with a "stated" value of $5 each, is shown below. The number of common shares is the same as in the previous balance sheet, although in practice any number might be used that suited the convenience of the promoters and gave a satisfactory unit of market value. A nominal par instead of no par might be advantageous for tax reasons.

ILLUSTRATION II. CONSOLIDATED *AB* CORPORATION

Current Assets (net)	$1,000,000	Bonds	$ 400,000
Fixed Tangible Assets (net)	4,600,000	Preferred Stock	200,000
		Common Stock*	385,000
		Capital Surplus	4,615,000
	$5,600,000		$5,600,000

* 77,000 shares without par value.

The division of the capitalization. The most difficult problem, that of allotting the securities, remains. It matters little to the financial realist whether the stock certificate shows a high par value or none, whether or not the balance sheet shows goodwill, or whether the shares are numerous or few. What counts is the *proportion* of the stock he receives. Here is the promoter's hardest task. He must satisfy the shareholders of the various companies that their relative status is being preserved, and that they are properly compensated for the contribution made by their respective companies to the new or enlarged company, as measured by past performance and future prospects.

The constituent companies contribute two main elements to the new or enlarged company—net assets and net earnings. These must be taken account of in the plan of exchange of securities, and differences between the two must be reconciled. In addition, a third factor, management, may also have to be considered. The management of one company may have extra value that is not reflected to a great extent in past earnings but may be expected to result in increased earnings of the new company's property after the fusion. The assets of the constituents should be appraised by an independent appraiser. (In all too many cases, this precautionary step is not taken.) The accounting practice of showing fixed assets at cost less depreciation is particularly likely to mean that the

accounts of different corporations are not comparable because of differences in prices at the time of purchase and differences in depreciation policy. The income statements of the constituent companies for several years should be studied, and adjustments should be made for such items as incorrect distributions between capital and revenue, failure to make proper provision for depreciation, bad debts, repairs, and other expenses, and differences in managerial salaries. Adjustments in such matters, as well as in taxes, insurance, and occasionally interest, may be necessary to judge what earnings would be if they had been administered under a uniform policy and under uniform conditions.

1. *Exchange of shares on the basis of net assets contributed.* A possible, though unlikely, basis for distributing stock to the shareholders of the constituent companies would be to allot the shares on the basis of assets contributed, as measured by the percentage of net assets to the total. Thus, in our hypothetical illustration, the common stockholders of *A* contribute net tangible assets of $1,250,000, while those of *B* contribute $3,750,000. On this basis, one fourth of the common stock of the new company would go to the common stockholders of *A,* and three fourths would go to those of *B.* Common shareholders of A would get 19,250 shares of the new company's common stock, or 1.925 shares in the new company for each share held in the old, while those of *B* would get 57,750 shares, or 2.31 shares for each share held in the old. [13] From another angle, since the book value per share of A stock was $125, while that of *B* was $150, the distribution of stock of the new company is in accordance with book value contributed if we adopt the second balance sheet, which excluded goodwill and is assumed to show comparable values, presumably replacement cost less depreciation.

This distribution would undoubtedly be unsatisfactory to the common stockholders of Company *A,* on the grounds that it failed to give weight to their superior earning power. The average earnings on *A's* common stock had been $30 per share, while on *B's* they had been only $16 per share.

If, however, the term *net assets* had been made to include the goodwill (exclusive of that based on "combination" profits), the distribution would have been in proportion to earnings. A's common stockholders would receive 3.3 shares of new stock for one of old, and *B's* would receive 1.76 shares.

Before passing to the significance of earnings, the relative unimportance of assets as such should be stressed. As Bonbright has said: "It will benefit the owner of an enterprise nothing to possess

[13] If the promoters can induce the stockholders to accept a smaller amount, the difference may be sold or issued to the promoters and bankers for their services.

a company with *costly* assets. What the owner wants is profitableness, not expensiveness." [14] However, it must be remembered that even the *past* record of earnings is only circumstantial evidence as to *future* earnings, and there is a strong tendency in practice to think of assets as an independent factor that may also be the basis of profits. One of the reasons for merger often lies in the hope of restoring a property to more profitable operation. However, if assets are to be given independent weight in determining shares in a consolidation, it should be on the basis of estimated contributions to earning power.

An exception is found in redundant assets—that is, assets not required in the operations from which the operating earning power is derived. Such assets should be treated as an extra contribution, since past operating earnings have been produced without their aid, and they should be given independent weight. Sometimes they are liquidated, and the proceeds are added to the allotment of securities for the contributing corporation. Sometimes, when the superfluous asset is cash over and above a normal balance, the consolidation might allot bonds or preferred stock rather than issue such securities later to obtain the equivalent funds.

2. Distribution of shares on the basis of earnings contributed. If the exchange of shares were based on earnings contributed, in our hypothetical example, three sevenths of the stock of the new company would go to the common stockholders of *A,* and four sevenths would go to those of *B.* On this basis the holder of one share of A common stock would get 3.3 shares in the new company, while the holder of one share of *B* stock would get 1.76 shares. This basis is equivalent to exchanging the shares in proportion to the earnings per share of the former companies, which had been $30 and $16 per share, respectively. But the stockholders of Company *B* might object to this arrangement, on the grounds that their larger assets involve higher potential earning power, and that they were contributing more total net current assets and more book value per share to the combination.

3. Reconciling earnings and assets. To deal with this problem of reconciling the uneven contributions of earnings and assets which the constituents may make to a merger or consolidation, it has been suggested that the surviving or consolidated corporation issue preferred stock with a par value equal to the contributions of net tangible assets, and common stock to represent earnings of the consolidated company over the amount of tangible assets. A variation of this method is to use bonds instead of preferred stock for that part of the net tangible assets made up of net current assets. [15]

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[14] Bonbright, *op. cit.,* p. 238.

[15] Bonds were necessary in order to raise cash from the public when all or

This formula for giving prior securities for tangible assets and common stock for earning power over the amount paid on such prior issues has been called the "scientific" method of consolidation.[16] It was used chiefly in the industrial consolidations at the end of the last and the beginning of the present century.[17] In recent years the use of common stock alone has been the more common practice.

The actual working of this formula can best be understood by examining the results which would obtain under various circumstances. The situation used as an illustration just above may be revised to fit the new procedure as follows:

ALLOCATION OF EARNINGS AND SECURITIES

Plan 1. 7 per cent preferred for net tangibles, and common stock for balance of earnings, capitalized at 10 per cent.

	Division of Earnings		*Division of Stock*	
	A Company	*Company*	*A Company*	*Company*
Preferred	$ 87,500	$262,500	$1,250,000	$3,750,000
Common	212,500	137,500	2,125,000	1,375,000
	$300,000	$400,000	$3,375,000	$5,125,000

Plan 2. 4 per cent preferred for net tangibles, and common stock for balance of earnings, capitalized at 10 per cent.

	Division of Earnings		*Division cf Stock*	
	A Company	*Company*	*A Company*	*Company*
Preferred	$ 50,000	$150,000	$1,250,000	$3,750,000
Common	250,000	250,000	2,500,000	2,500,000
	$300,000	$400,000	$3,750,000	$6,250,000

Problems of the preferred issue. The three main problems for the preferred are the amount to be issued, the rate of dividend, and voting power. Since assets are the basis for the amount, an appraisal may be necessary when book values are not comparable.

a part of the current assets were retained by consolidating companies and only fixed assets were turned in.

"See C. W. Gerstenberg, *Financial Organization and Management* (New York: Prentice-Hall, Inc., 2nd rev. ed., 1939), Chapter XXIX, and H. A. Finney, *Principles of Accounting* (New York: Prentice-Hall, Inc., 1934), Vol. II, Chapter 51, for hypothetical cases applying this method.

See S. P. Meech, "Financing Problems of Consolidation," *Journal of Business of the University of Chicago,* April, 1930, pp. 130-150, for several plans of distributing the common stock under the "scientific" method; these were proposed for an actual consolidation.

'Most of the industrial corporations have been formed within the past 10 or 15 years, and the preferred stock in nearly all cases represented at the time of formation the physical value of the plants consolidated, while the common stock generally represented the capitalization of future profits *or* simply voting power." John Moody, "Preferred Stocks as Investments," *Annals of the American Academy of Political and Social Sciences,* May, 1910, p. 545.

An appraisal would be on the basis of current replacement value, with allowances for depreciation and obsolescence.

The dividend rate can be made high, as under Plan 1, thereby giving heavy weight to assets, or it can be low, as under Plan 2. When earnings are small, a low rate may have to be used in order to have any surplus for a suitable supporting common stock issue. When earnings are subnormal, the amount of preferred will have to be reduced below the total of tangible assets or eliminated.

The preferred may be without voting power if that suits the members of the consolidation and the promoter, or it may be given not only voting power but also a large share of that power by cutting the common into a relatively few shares of high par value. The presumption is that those who get preferred should have less voting power because of their protected position. The effect of different arrangements may be seen in the above plans. If the preferred had no vote, the control would go to the smaller company under Plan 1; under Plan 2 the voting power of the two companies would be equal. Were both preferred and common given equal par value and voting power per share, Company *B,* the larger corporation, would have control under either plan.

Problems of the common stock. Some of the problems of the common stock, such as voting power, are complementary to those of the preferred and require no separate discussion. As for the amount to be issued, this procedure, by stressing "amount," implies stock with par value. In recent years common stock without par or with a nominal par has made large intangible assets in the balance sheet of the consolidation unnecessary and eliminated the hazard that a court might later hold that a liability existed for stock issued in excess of values contributed. Even when par value is used, the amount of goodwill can vary greatly, depending upon such variables as the dividend rate for the preferred, the rate at which net earnings for the common are capitalized (10 per cent was assumed above), and the optimism of the promoters in their estimates of future earnings.

Overcapitalization. With such variations possible, it is apparent that considerable differences of opinion may arise as to what the correct capitalization for a consolidation should be. A simple test might seem to exist in the subsequent ability of the corporation to earn a sufficient amount to maintain the common stock issued at its par value. Aside from the objection that this measure is based on hindsight, such a usage is open to the obvious objection that it would label as "overcapitalized" a corporation with no intangibles in its balance sheet and all tangibles carried in accordance with conservative accounting roles whenever it fell short of commercial success, and the market value of its stock fell below par. The term

overcapitalization is so generally associated with the idea of wrongdoing that its use should be avoided even when goodwill is carried as an asset, save in cases where there has been a patent failure to pay par value in full—that is, cases of "watered" stock in the strict legal sense.

The common elimination of intangible assets and the use of stock with either a nominal or no par value has made apparent the need for shifting emphasis to a proper accounting for tangible assets and earnings. With properly prepared financial statements and reasonable information as to how values are arrived at, the competent reader is in a better position to place his own interpretation upon promoters' estimates and evaluate securities without any illusions based on par value.

Advantages of a complex structure. One advantage in using securities other than common stock lies in the variety of combinations of income, risk, and control that is made possible. As shown in the above illustration, corporations with considerable assets but moderate earnings can be given a large nominal amount of preferred with a low dividend rate. (In these plans a further step might have been taken by giving Company *A,* with its higher earning power, a higher preferred dividend than that given to Company *B,* thereby permitting a division of common in proportions more nearly those of total earnings.) With priority, those stockholding interests which are desirous of retiring from active positions may be attracted to the plan. Promoters and the leading stockholding interests in the younger and more aggressive corporations can, as a result, be given a larger share of control and of potential profits.

Another major advantage of the more complex structure, especially in the eyes of the investment banker who is undertaking to sell some part of the securities, is the fact that a larger total market value may be achieved than where only common stock is used. Thus, if a consolidation with $12,000,000 of earnings used common stock alone and the stock could be sold on an 8 per cent earnings basis, the capitalization would have a market value of $150,000,000. If, however, a 5 per cent preferred amounting to $80,000,000 par value could be marketed at par, and the balance available for common of $8,000,000 were capitalized by the market at the same rate of 8 per cent, the total valuation would amount to $180,000,000.

	Capitalization		*Earnings*	
	Common Stock Only	*Preferred and Common Stock*	*Common Stock Only*	*Preferred and Common Stock*
Preferred...	$150,000,000	$ 80,000,000	$12,000,000	$8,000,000
Common. ..		100,000,000		4,000,000
	$150,000,000	$180,000,000	$12,000,000	$12,000,000

As a matter of principle, it might be argued that the risk for the common is increased by the introduction of preferred, and therefore the rate of capitalization for the common stock earnings would rise so as to counterbalance the advantage. In practice, the market often fails to show such a nicety of risk appraisal and in periods of stock market optimism may even deem the advantage of trading on equity and the possibility of more rapid appreciation as wholly offsetting the greater risk that attends a common stock preceded by other issues. Hence total market value of the capitalization may be increased at times by the use of a capital structure that includes bonds and preferred stock. Some idea of the potential importance of this factor may be had by noting the market value that a dollar of earnings may have when capitalized at low rates (as for bonds and preferred) as compared with high rates (as for common stock).

$1.00 of earnings capitalized at	4%	=	$25.00	market value		
$1.00 " "	"	6%	=	16.67	"	
$1.00 " "	"	8%	=	12.50	"	
$1.00 " " "	"	10%	=	10.00	"	"

One of the problems of promoter is to create a capital structure that will maximize values without endangering the financial future of the corporation. Even though a capital structure of only common stock is employed, the consolidation should show an increase in stock values over the sum of the values of the stock of its constituents, partly because of the increased marketability of the single large stock issue and partly because of the increase in earnings due to combination.[18] These enhanced values are the basis for the promoter's compensation in so far as he does not have to give them up to induce the various interests to accept the combination plan.

Market value as a basis. Another basis that might be used to measure contribution and so be used to determine the proportionate share of securities in a combination is the past record of market value of the securities, particularly the common stock of the constituent corporations. Thus, if two companies are to be merged, and if the shares of one company are selling at $200, while those of the company to be merged are selling at $100, one share of stock of the former company may be given for each two shares of the latter. The argument for the use of market prices as the basis of exchange of securities is that in the market price all the factors of value—past earnings, asset values, management, and future outlook—are combined in one valuation. However, it may be difficult to obtain

[18] Herein is the reason why properties assembled by a promoter may be worth more to the consolidation than their cost to the promoter. Dodd, *op. cit.,* pp. 104-105. Similarly it explains why a block of stock that carries control has the opportunity of enhancing its earning by some change, such as the improvement of management, as compared with ordinary units of stock that must accept the *status quo.* Bonbright, *op. cit.,* pp. 46-48.

agreement as to which market prices are to be used. The market price of the stock of any corporation may be affected by a number of variables, and the price at one moment of time, or the average price over a period, does not necessarily represent the value of the stock for combination purposes. Market price is also susceptible to influence on the part of those interested in the merger. Nevertheless, market price is a measurable and understandable basis for the exchange of securities.

Illustrations

Example of consolidation by exchange of stock. Of the many examples which might be selected to illustrate consolidation by exchange of securities, a recent case in the steel industry may serve

TABLE 39

DATA FOR BASIS OF EXCHANGE OF SECURITIES IN CONSOLIDATION OF ALLEGHENY AND LUDLUM STEEL COMPANIES

	Allegheny	*Ludlum*
Total assets	$20,800,000	$11,000,000
Tangible fixed assets (after depreciation)	12,700,000	5,100,000
Net current assets	6,000,000	4,000,000
Book value per common share	25.04	18.10
Net current assets per common share	8.26	8.00
Average number of times preferred dividend earned, 1933-1937	5.09	
Average earned per common share, 1933-1937	1.77	.97
Earned per common share, 1937	2.10	$ 2.25
Dividends paid per common share, 1937	1.60	1.00
Market price range, common stock, 1937	13-456	138-411
Market price range, common stock, August 10, 1938	18t-19	181-19

Source: Poor's *Industrial Volume,* 1938. Except where otherwise indicated, figures are for December 31, 1937.

as a sample of the simpler type of arrangement. At special meetings held on August 10, 1938, the stockholders of Allegheny Steel Company and Ludlum Steel Company voted to consolidate into the Allegheny Ludlum Steel Corporation. The management of the two companies explained that considerable economies were expected from the combination of the properties, especially in the production of stainless steel. The basis of exchange of securities was simple: Common stock of both companies was traded share for share for the common stock of the consolidated company, and the preferred stock of Allegheny Company ($100 par) was exchanged into preferred stock of the consolidated company.

The comparative data shown in Table 39 may serve to explain the basis of exchange of securities.

These data indicate that, while Allegheny stockholders were contributing the higher total asset values per share, Ludlum shareholders were contributing substantially the same amount of net

current assets per share. Greater emphasis is usually placed upon the *book* value of current assets than that of fixed assets because the former are so much more likely to approximate current market value. Current assets are also easier to turn into cash and to that extent possess a value independent of earning power. While higher average earnings per share had been reported by Allegheny for the period 1933-1937, in 1937 the two companies were about equal in this respect. The stock market's appraisal, as measured by prices prior to consolidation of the two companies, in which presumably all the factors bearing upon investment value are summed up, supports the equal treatment per share for the two companies. The fact that the quotations for the common stocks were the same on the date of the approval of the consolidation is of course merely the result of the previous announcement of the probable terms of exchange.

Examples of mergers. The financial history of the motor industry has been characterized by the steady growth of large corporate groups, in which expansion "from within" has been coupled with growth by merger, consolidation, and the use of the holding company device. The latest merger involving a leading motor company differed from most others in that the motor company absorbed, not another motor company, but an electric household equipment concern, illustrating the tendency within the automobile group to expand into lines other than motors and allied or accessory products. On December 23, 1936, the stockholders of Nash Motors Company and Kelvinator Corporation approved an agreement of merger which provided for a change in the name of Nash Motors Company to Nash-Kelvinator Corporation and the merger into it of Kelvinator Corporation through an exchange of 1i shares of Nash-Kelvinator common stock for each share of Kelvinator common. Kelvinator Corporation lost its corporate existence, and the operations of the enlarged company are now carried on in two divisions—Nash Motors Division and Kelvinator Division.

The following financial data were available at the time of merger:

	Nash	*Kelvinator*
Total assets	$38,030,000	$21,421,000
Tangible fixed assets (after depreciation)	5,372,000	7,283,000
Net current assets	26,038,000	8,157,000
Book value per share	$12.30	$16.70
Net current assets per share	9.54	7.03
Earnings per share—average 1932-1935	$ .51 (d)	$ .82
Earnings per share—latest year	.39	1.34
Market price per share-1936 range	15-21-1	141-251
Closing market price per share, Dec. 23, 1936	16-}	211

d= deficit.

Source: Moody's *Manual of Investments, Industrials,* 1937. Figures for Nash are for years ending November 30; for Kelvinator, years ending September 30. The asset figures are those for the respective year ends in 1936.

Inspection of these figures shows that Nash was contributing heavily in assets, especially current assets, but little in earnings. While Kelvinator was enjoying the substantial profits that marked the mechanical refrigerator business of this period, Nash had had poor earnings, along with other "independent" automobile manufacturers since the prosperity of 1926-1930. The profits of the pre-depression period help to explain the hopes—not unusual in a recovery period—and the market price. Market prices, in turn, reflected an appraisal of the future which evidently influenced the merger arrangement. Market values are likely to be a potent factor in combinations of corporations whose securities are listed, although they should be regarded as evidence rather than conclusive proof of the relative contributions of the several corporations.

An interesting case in which both preferred stock and common stock were involved is provided by the merger of Safeway Stores, Inc., and MacMarr Stores, Inc. On September 11, 1931, the former company, a rapidly expanding food chain with numerous subsidiaries, acquired MacMarr Stores on the basis of of a preferred share (7 per cent) and A of a common share of Safeway for each MacMarr preferred share (7 per cent), and i of a common share of Safeway for each MacMarr common share. The data shown in Table 40 throw light on this arrangement.

From these data it is apparent that the owner of one preferred share of MacMarr was exchanging his $7.00 dividend for $4.90 in Safeway preferred dividends of $7.00) and about $1.40 (A of $4.81) in earnings per share on the common he received, plus the opportunity to share in the future profits of the enlarged concern. While this exchange meant a reduction in current income, the MacMarr preferred was receiving about $95 in market value of Safeway preferred and common (based on 1930 average prices) for the $87.50 previously held. This arrangement illustrates how it may be equitable for a security holder to receive a reduced income when the increase in the investment quality is a sufficient counterbalance, as indicated here in relative market price and margin of safety for the two preferred stocks involved. The owner of one share of MacMarr common stock was giving up earnings averaging $1.71 over a five-year period for average earnings of only 84 cents, but on the basis of the 1930 record he was giving up earnings of only 79 cents for earnings of 88 cents. He was exchanging book value of $5.10 for book value of $7.55. However, the fact that the exchange increased the market value of his shares from $14.68 to $16.50 (based on 1930 average prices) would indicate that the deal would be satisfactory to the MacMarr common stockholder.

Such cases should emphasize the point that not past performances as such but probable *future* earnings, which the past record

helps one to evaluate, are the important factor in determining the attitude of intelligent stockholders. The *trend* of earnings may be a more important consideration than the actual amounts on record, as in the Chrysler-Dodge merger in 1928.[19] Individual personalities and powers of persuasion may also override the statistical record on occasion. Every merger case involves a mixture of material and personal elements, and in most cases the terms of

TABLE 40

DATA FOR BASIS OF EXCHANGE OF SECURITIES IN SAFEWAY-MACMARR MERGER

SAFEWAY STORES, INC.	
7% Preferred stock:	
Average earnings per share, 1926-1930	$33.37
Times 7% dividend earned, 1930	5.17
Price range, 1930	95-1091
Common stock:	
Average earnings per share, 1926-1930	$ 4.62
Earnings per share, 1930	4.81
Dividends per share, 1930	5.00
Price range, 1930	381-1221
Book value per share, Dec. 31, 1930	41.55
MACMARR STORES, INC. (ORGANIZED IN 1929), OR PREDECESSOR COMPANIES	
7% Preferred stock:	
Average earnings per share, 1928-1930	$21.20
Times 7% dividend earned, 1930	1.99
Price range, 1930	75-100
Common stock:	
Average earnings per share, 1926-1930	$ 1.71
Earnings per share, 1930	.79
Dividends per share, 1930	1.00
Price range, 1930	81-241
Book value per share, Dec. 31, 1930	$5.10

exchange can be explained only in part by balance sheet and income statement figures.

Special Problems

Fusion of public service corporations. While railroads and utilities formerly had the same freedom as industrial corporations in fusion, they are now very generally subject to commission regulation. They are more and more generally obliged to carry their assets under a supervised system of accounting at figures that repre-

[19] One share of Chrysler common, which had reached maximum earnings per share of $6.55 in 1927, and was paying $3.00 in dividends, was exchanged for each share of Dodge Brothers preferred, which paid $7.00 annually. But Chrysler's earnings were on the up-trend, while those of Dodge were on the down-trend.

sent cost less depreciation to the original corporation. Goodwill is not permitted and would be an anomaly in a business which is regulated so that earnings may not exceed a fair return upon actual tangible investment. Similarly, securities to be issued, whether for a purchase of assets, merger, or consolidation, must ordinarily be approved by the commission in authority. While lax regulation has permitted violations of the principle, securities would ordinarily be restricted to the amount of property values upon which the commission might reasonably be expected to allow a fair return to be earned.[20]

Such emphasis upon asset values would appear to be at decided variance with the emphasis placed upon earning power in industrial combinations. The difference is nominal, however, if the asset values are the effective factor in determining the earnings. But, when earnings fall short of a "normal" return, varying greatly from company to company and showing little promise of rising to the level of a "fair return," emphasis upon assets would work a grave injustice as between security holders of merging companies. This disparity between assets and earnings has been widely prevalent among the railroads and traction companies in recent years. Probable future earnings would be the fair basis for measuring the contribution to a fusion in such cases. Savings due to the combination would constitute a margin for bargaining among the constituents of the proposed fusion.[21]

Effect of merger and consolidation on the constituents' creditors. Upon merger or consolidation, the successor corporation is liable for the unpaid debts of each of the constituents. (In some cases current assets are used to pay off current creditors, and the balance is distributed in cash to the stockholders, so that only fixed assets and funded debt are "taken over.") The creditors of the constituents, both secured and unsecured, become the creditors of the consolidated company. Bond issues of the company which is absorbed in a merger, and of all constituents in a consolidation, become assumed bonds of the surviving or consolidated company.

Secured creditors of the constituent companies become secured creditors of the new or consolidated company, retaining their liens on the particular assets which had been pledged for their protection.

[20] However, fair return is allowed upon the commission's valuation of operating property and not upon capitalization. It is a moot question as to how far a commission might be influenced in its valuation by the amount of capitalization which it had previously authorized to be issued.

[21] A special source of saving under the recapture clause (now repealed) of the Transportation Act of 1920 arose from the possibility that a railroad earning more than the standard return could combine with a railroad earning less than that percentage and so preserve the excess from recapture by the Federal Government. Merger could result in the combined earnings being a lower percentage of the combined properties than the stipulated standard return.

The new company may refund such debts by issuing consolidated bonds that are based on the superior earning power of the larger unit and therefore bear a lower rate of interest and contain less onerous terms than were included in the separate issues.

The unsecured creditors of the constituent companies become creditors of the new or surviving company. Their position may be indicated by illustration. Take the case of two companies, *A* and *B,* which have been consolidated into Company *C. C* assumes the secured and unsecured debts of *A* and *B.* Suppose further that a first mortgage bond issue of Company *A* is subsequently defaulted. The secured creditors would have a prior claim with respect to the property specifically pledged by *A,* but, in case of a deficiency judgment, in so far as *B's* property is concerned, they would follow *all* former creditors, both B's secured and unsecured, under the rule of equity. The unsecured creditors of Company *B* have the protection of the rule that general creditors may proceed against the particular assets owned by the company prior to consolidation, since these assets constitute a fund for the benefit of the creditors.

Unfortunately the right of general creditors to the assets of consolidated companies has not been entirely settled by the courts, although the rule of equity just cited seems to have been most generally followed. When such a rule is applied, the order of claims against Company C's property would run as follows: [22]

1. Secured creditors whose debts have been assumed have first claim against the properties of the original corporation which were mortgaged for their security, and a general claim on the properties of the other corporation brought into the fusion following the latter's creditors, both secured and unsecured.
2. Unsecured creditors of the original companies have a general claim on the respective original properties following the specific claims against these properties, but the general creditors of one constituent have a general claim after secured obligations on the assets brought in by that constituent and prior to any deficiency claims of the creditors secured by the property brought in by the other constituent.
3. Secured creditors holding bonds of the consolidated company proper can be given only a junior claim on the property securing the assumed mortgage bonds, but they may have a prior claim on new property not brought in by the original constituents.

Effect of merger and consolidation on special classes of creditors. One of the most important problems which arises in connection with creditors is the treatment of bond issues containing the after-acquired-property clause. In a consolidation, both of the

22 Grange, *op. cit.,* pp. 593 and 597.

constituent companies lose their identity, so that neither can be said to acquire the other's property, and an after-acquired-property clause in a bond issue of one company will not cover the property brought in by the other. The common practice is to close the mortgages of the constituent companies and thus pave the way for new consolidated mortgage bond issues. The situation is somewhat different in the case of a merger. Here one company is acquiring new property, and its mortgage containing an after-acquired-property clause will cover the property of the merged company, subject, of course, to any existing claims of the merged company's creditors on that property.

When one of the constituent companies has issued convertible bonds which are assumed by the successor corporation, the courts have usually held that the conversion privilege is extinguished by the fusion, unless some provision to the contrary is made in the agreement.[23]

So much for the legal status of creditors. Actually the financial or investment position of creditors (and of preferred stockholders) may be considerably changed by a merger or consolidation. Suppose, for example, that two companies, A and *B,* which are to be consolidated into Company C, have the following capital structures and earnings:

	A	
5% First mortgage bonds	$2,000,000	.....
6% Debenture bonds	2,000,000	$1,000,000
7% Preferred stock ($100 par).	1,000,000	.....
Common stock ($100 par)	4,000,000	1,000,000
Surplus	1,000,000	2,000,000
Earnings available for interest.	390,000	360,000
Net income available to the common stock	100,000	300,000

If preferred stock equal in amount to the original issue is exchanged for the old preferred of *A,* and the common stock is increased $2,500,000 to represent savings of the consolidation, the capital structure of the consolidated company will be_ as follows:

	Amount	*Charges*
5% First mortgage bonds	$2,000,000	$100,000
6% Debenture bonds	3,000,000	180,000
7% Preferred stock	1,000,000	70,000
Common stock	7,500,000	
Surplus.	3,000,000	

The earnings protection to the holders of the various issues of

[23] Such a provision is not uncommon. For example, when Chrysler Corporation absorbed Dodge Brothers in 1928, it assumed the latter's 6 per cent convertible debentures. These bonds were made convertible into Chrysler common stock. They were subsequently called.

Companies *A* and *B (1)* before consolidation and (2) after consolidation, if it is assumed that net income before interest increases to $1,000,000, may be summarized as follows:

COMPANY A

	Before Consolidation	*After Consolidation*
First mortgage bonds, times interest earned	3.9	10.0
Debenture bonds, times interest earned	1.8	3.6
Preferred stock, times dividend earned	1.3	2.9
Per cent earned on common equity	2	6.2

COMPANY B

	Before Consolidation	*After Consolidation*
Debenture bonds, times interest earned	6.0	3.6
Per cent earned on common equity	10	6.2

The consolidation strengthens the position of *A's* security holders and weakens that of *B's* through dilution. The earnings coverage on A's bonds and preferred stock rises through the addition of the earnings of Company *B* and the savings from consolidation, whereas the fusion is correspondingly unfavorable to the debentures of B.[24] Yet *B's* debenture holders are well-nigh powerless to protest. Their status would be improved, and the capitalization of the consolidation would be more conservative, if *A's* preferred were exchanged for common stock and its debentures for preferred stock. The former exchange would be more difficult for the representatives of *B* to insist upon.

Legal position of mergers and consolidations. The legal status of outright fusion may appear to be more secure than that of the holding company and the looser forms of combination. Under the Clayton Act the ownership of stock of one interstate corporation by another is specifically prohibited when the effect is substantially to lessen competition between them, and this provision has been given the narrowest possible interpretation by the Supreme Court. Thus the prohibition cannot be applied to a merger or consolidation if it is completed, and title to the acquired properties is vested in the surviving corporation, before any action is brought by the Federal Trade Commission. Neither can it be applied in the case of an outright purchase of assets, with the result that this has become

[24] "Times interest earned" and "times preferred dividends earned" are the most important single measures of earnings protection. They should be calculated on the "over-all" basis—that is, as the ratio of earnings to charges on each issue plus those on the preceding issues. Thus, in the case of Company *A* before consolidation, earnings of $390,000 were available for bond interest. The "times interest earned" ratio for the debentures (1.8) is calculated by dividing the $390,000 earnings by the interest on the debentures ($120,000) plus that on the first mortgage issue ($100,000).

a more popular method of effecting a combination of competing corporations.[25]

However, such combinations might still be vulnerable under the Sherman Act of 1890, which prohibits every "contract, combination . . ., or conspiracy in restraint of trade" and attaches no particular significance to the method by which combination is effected.

Merger versus consolidation. While mergers and consolidations have much in common from the financial point of view, they have certain differences that should be kept in mind In general, when a small company is being fused with a large one, merger of the smaller, requiring the consent of its presumably fewer stockholders, is a simpler process than consolidation. This advantage of simplicity may be particularly important if the larger corporation has a variety of stock issues from which consent must be had. Sometimes dissolution of the larger corporation might endanger valuable goodwill or a valuable corporate charter or a franchise that could not be transferred to a consolidated company. When the smaller corporation has such a reason for avoiding dissolution, the holding company relation, discussed in the next chapter, is indicated.

Consolidation, by wiping out all of the former corporate entities, gives a greater freedom in setting up a new administrative personnel and organization. Possible offense that might be given by making one corporation the survivor, as in a merger, is also avoided. The creation of a new corporation offers an opportunity for writing a new charter and incorporating in a new jurisdiction. Consolidation also permits a greater freedom in revising the accounts of all the constituent properties—say to bring into the accounts up-to-date valuations—without offending the accounting proprieties.

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[25] For a condensed account of the status of fusions under the Clayton Act, see Leverett S. Lyon and others, *Government and Economic Life* (Washington, D. C.: The Brookings Institution, 1939), Vol. I, pp. 289-291.

On the whole subject of the legal status of mergers and consolidations, see National Industrial Conference Board, Inc., *Mergers and the Law* (New York: The Board, 1929).

CHAPTER 25

HOLDING COMPANIES

Holding Companies in General

Importance of the holding company. The holding company has come to occupy a leading position as a combination device.[1] The ownership of a controlling stock interest forms a more effective bond than the looser forms of combination and is easier to effect than fusion by merger or consolidation. Many of our great corporate giants, such as United States Steel Corporation, American Telephone and Telegraph Company, the Pennsylvania Railroad system, and any number of electric light and power systems have used the holding company arrangement to promote their growth. Bonbright and Means have stated:

> Even without the holding company, to be sure, there would still have been a notable upward trend in the size of dominant business enterprise of the country; for expansion can and does take place by internal growth, by outright purchase of competing and related properties, and by merger or amalgamation. Nevertheless, without the power to purchase controlling stock interests in other companies—a power which is the essence of the holding company device—the concentration of capital into larger and larger business units would certainly have had a much slower growth than is shown by the figures of the last decades?[2]

The campaign of the Roosevelt Administration against holding companies in general and utility holding companies in particular, evidenced by such legislation as the Public Utility Holding Com-

[1] Of the many sources dealing with the holding company, J. C. Bonbright and G. C. Means, *The Holding Company* (New York: McGraw-Hill Book Co., 1932), is the most complete. The use of the holding company in the railroad field is covered in *Regulation of Stock Ownership in Railroads,* H.R. 2789 (1931), 71st Cong., 3rd Sess. A most exhaustive study of electric and gas holding companies is contained in Federal Trade Commission, *Utility Corporations,* reports made under Senate Res. 83, 70th Cong., 1st Sess. These reports have been issued in 95 volumes as Senate Doc. No. 92.

Comprehensive bibliographies on the holding company are found in Bonbright and Means, *op. cit.;* Federal Trade Commission, *op. cit.,* No. 69A, pp. 607-618; Securities and Exchange Commission, *List of References on Public Utilities* (Washington: The Commission, 1936).

[2] Bonbright and Means, *op. cit.,* p. 5. These authors go on to say that the holding company has grown important at least in part because it has largely escaped social control and regulation. Since the passage of the Emergency Transportation Act of 1933 and the Public Utility Holding Company Act of 1935, this situation has changed.

pany Act of 1935 and by the recent Federal investigation of the American Telephone and Telegraph system, as well as the spectacular collapse of some of the great utility systems in the early 1930's, has made the American public decidedly "holding company conscious." But to the student and practitioner of finance the widespread use of the holding company and the many financial problems it presents provide even stronger reasons for a careful examination of its nature and financial operation.

Meaning of "holding company." In its broadest sense, a holding company may be defined as any corporation which owns stock of one or more other companies. Under this definition, large railway, utility, and industrial companies owning investment portfolios or stock in subsidiaries and affiliates would be classed as holding companies. Investment trusts, insurance companies, and other financial institutions would also fall into this category. In the more generally accepted use of the term, which will be employed here, the holding company is a corporation which owns enough of the voting stock of another corporation to have working control over it.[3] Companies which operate property of their own in addition to controlling other corporations through stock ownership are called *parent,* or *holding-operating,* companies. This term is particularly appropriate if the large company has taken the initiative in forming the smaller one. Most large corporations belong in this group. Companies which do not operate properties, but simply direct the operations of their subsidiaries, are called *pure holding* companies. The most notable examples of this type, outside of certain industrial companies, such

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Another definition of the holding company is as follows: "Any company, incorporated or unincorporated, which is in a position to control, or materially to influence, the management of one or more other companies by virtue, in part at least, of its ownership of securities in the other company or companies." Bonbright and Means, *op. cit.,* p. 10. This very broad definition would include certain finance and investment companies, as well as others which may not have been formed for the purpose of control, but which have come into a controlling position either temporarily or permanently.

The Public Utility Holding Company Act of 1935 defines a utility holding company, for the purpose of placing it under the jurisdiction of the Securities and Exchange Commission, as follows (Sec. 7) :

"Holding company means—

"(A) Any company which directly or indirectly owns, controls, or holds with power to vote, 10 per centum or more of the outstanding voting securities of a public-utility company or of a company which is a holding company by virtue of this clause or clause (B), unless the Commission, as hereinafter provided, by order declares such company not to be a holding company; and

"(B) any person which the Commission determines, after notice and opportunity for hearing, directly or indirectly to exercise (either alone or pursuant to an arrangement or understanding with one or more persons) such a controlling influence over the management and policies of any public utility or holding company as to make it necessary or appropriate in the public interest or for the protection of investors or consumers that such person be subject to the obligations, duties, and liabilities imposed in this title upon holding companies."

as the United States Steel Corporation, and a few railroad holding companies, such as the Pennsylvania Company and the Alleghany Corporation, are to be found in the utilities field. Companies which operate their own property direct and do not exercise control of others through stock ownership are known as *operating* companies. *Affiliated* companies are companies related by being part of the same holding company system or by community of interest.

In deciding how to classify mixed operating and holding companies, the relative importance of earnings and assets in the operating and subsidiary categories may be used as a criterion.[4] Some companies, such as the Ford Motor Company and Commonwealth Edison Company, are predominantly operating companies even though they control a few subsidiaries and are thus technically parent companies. Others, like American Telephone and Telegraph Company, E. I. duPont de Nemours and Company, and General Motors Corporation, although important operators in their own right, control many subsidiaries whose earnings and property are important, and so they are more properly called *holding,* or *parent,* companies.

Types of holding companies. Holding companies may be cIaSsified on the basis of the type of service they render to their subsidiaries. If financial and managerial aid is rendered directly rather than through specialized companies, no qualifying term is employed. If, however, its services are chiefly financial, the term *financing* holding company may be employed. If the main role of the holding company is to supply the subsidiaries with managerial services, the term *management* holding company is used. In some of the big utility systems, the holding company has affiliated with it separate financial, management, and even engineering companies, so that the subsidiaries are offered every possible service from within the system.[5] The financing company advances funds to the subsidiary, aids in the sale of its securities, and helps to finance the purchase of

[4] Bonbright and Means suggest that, if the management of one of the constituent companies is promoting the combination, or one of the constituent companies is outstanding in size and financial strength, that company is likely to be made the holding company. Op. *cit.,* pp. 51-54. This type of parent company is common in the industrial and railroad fields. The presence of the outside promoter and the comparative equality of units help to explain the opposite practice of using pure holding companies in the utility field.

[5] "In some cases, the holding company itself becomes a service company and enters into contracts with its various operating companies, whereby it agrees to perform certain managerial services in exchange for a stated percentage of the gross earnings of the subsidiaries. In other cases, the holding company owns the stock of one or more separate management, engineering, and financial corporations. . . . In still other cases, the controlling stock of the holding company is, in turn, owned by an engineering and management company, which forms the apex of the entire utility system and which is under the domination of a group of bankers and engineers." Bonbright and Means, *op. cit.,* p. 178.

equipment. The management company sells operating, legal, engineering, and accounting service to the subsidiaries and is paid by a service charge. Among the regulated public utilities, the currently approved basis for such a charge is actual cost, lest such charges be used to inflate the costs of the subsidiaries.

Another way of classifying a holding company is on the basis of its position in the ladder or pyramid of holding companies that constitute the system. The tendency among industrial and railroad systems is toward simplicity—a single holding or parent company controlling its subsidiaries directly in "tandem" style. In the utility field, however, the top holding company often controls its properties through a succession of intermediary holding companies. At the top is what is known as the *superholding* company, which forms the apex of a pyramid sometimes extending down through as many as six or seven steps, or layers, of corporations. Its services to subsidiaries may be primarily financial, management, engineering, or a combination of all three. Next come the "subholding," or intermediate, companies, often established to head the various geographical groups of subsidiaries.[6] Then come the operating subsidiaries, which are engaged in providing their respective communities with utility services. Some of these may be "parents," controlling subsidiaries of their own. If the superholding company is itself controlled by a superfinance corporation, the number of layers in the whole system is further expanded. We shall see later the financial implications of this sort of "pyramiding."

Holding companies may also be classified on the basis of type of business into railway, utility, industrial, and financial groups. The second of these may be broken down into subtypes—groups consisting primarily of electric, gas, water, traction, and telephone companies. Most of the great utility supersystems contain properties devoted to all these services except telephone service. The American Telephone and Telegraph Company and subsidiaries do substantially nine tenths of the telephone business, the remainder being divided among a large number of small independent companies.[7]

Main purposes of the holding company. We have seen that the holding company may be formed for managerial, financial, or engineering purposes or for a combination of all of these plus whatever other benefits may arise from concentration of ownership and control. A detailed discussion of these purposes, in their relation to railroad, utility, and industrial corporations, will follow shortly.

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[6] Before its receivership in 1932, Middle West Utilities Company controlled five main subholding companies, each with a number of subsidiaries and sub-subsidiaries.

[7] See p. 274.

Before that, the general purposes of the holding company will be discussed.

The main reason for the use of the holding company has been to obtain the advantages of combined control of two or more new or formerly independent companies with a relatively small outlay of funds and without resort to the relatively difficult process of outright fusion. The motive in some cases has been the desire for monopoly, and in others it has been simply to gain the advantages of large-scale production, or at least of concentrated management. In the utility field, the operating subsidiaries already enjoy local monopoly, and the objectives are centralized or combined production, organization, purchasing, advertising, financing, distribution, and dealings with regulatory bodies.

Centralized financing may not only bring greater skill to bear upon the problem of raising funds but also make it easier to raise them. Subsidiaries may find that they can sell their securities more readily as members of a well-known system than as independent companies. Small or medium-sized corporations are often able- to sell bonds and preferred stocks but find their common stocks difficult to sell. A large, well-known holding company may have as its most valuable financial function the raising of money to supply sufficient common equities to keep operating subsidiaries' capital structures suitably balanced. This centralized or group financing has been much more important in the utility than in either the railroad or industrial field in recent years.

The use of the holding company device makes it possible to obtain control of large properties with a minimum investment, and to reap the maximum rewards of trading on the equity. The holding company needs to own only that portion of the *voting* stock of the subsidiaries which will give it control. If the subsidiaries are financed in part by the sale of senior nonvoting securities, the investment in enough common stock to control may represent but a small percentage of the subsidiaries' assets. The owners of the holding company may in turn control it with a smaller investment, if the holding company is also financed in part with senior securities. Furthermore, the ownership of the common stock of the subsidiaries by the holding company, and of the common stock of the holding company by its promoters, means that a substantial portion of the net income of the system may be passed on to the promoters with only a negligible investment by them. "Pyramiding" of control and profits has been carried to the extreme in the utility field, especially in those systems with several layers of Corporations in the structure.[8]

[8] For hypothetical and actual examples of pyramiding in utility holding company structures, see Federal Trade Commission, *op. cit.,* No. 72-A, Chapter IV.

Suppose the combined balance sheet of a group of operating companies presents the following situation:

Assets		*Liabilities*	
Sundry assets	$8,000,000	5% Bonds	$4,500,000
		6% Preferred stock	1,500,000
		Common stock	1,500,000
		Surplus	500,000
	$8,000,000		$8,000,000

Control of these operating companies may be obtained by the purchase of less than their total common stocks, if the preferred is nonvoting, but let us assume that a holding company owns all of the common stock, bought at book value, and that the funds required to purchase the stock are obtained through the issuance at par of $750,000 6 per cent bonds, $500,000 nonvoting 7 per cent preferred stock, and $750,000 common stock. The holding company's initial balance sheet would read as follows:

Assets		*Liabilities*	
Investment in subsidiaries	$2,000,000	6% Bonds	$ 750,000
		7% Preferred stock	500,000
		Common stock	750,000
	$2,000,000		$2,000,000

The owners of the majority of the common stock of the holding company, or $375,100, control the holding company, and through it the $8,000,000 property of the subsidiaries. The amount required to control is less than 5 per cent of the total property values. Even this small sum could be lowered if a larger proportion of nonvoting securities were used, or if an intermediate holding company, with its additional quota of nonvoting bonds and preferred stocks, were inserted between this hypothetical holding company and its operating subsidiaries.

Suppose further that the subsidiaries together earn $560,000, or 7 per cent on their total assets, after operating expenses. After interest and preferred dividends of $315,000 are paid, the balance of $245,000 is available to the holding company. If the holding company's operating expenses, which should be small, are ignored, this dividend income would cover the holding company's bond interest and preferred dividends of $80,000 and leave $165,000 for its common stock, a return of 22 per cent. These proportions may be seen in Figure 12.

Thus, by raising trading on equity to the second degree by the use of a single holding company, we see a return of 7 per cent on the

original operating property ($560,000 on $8,000,000) and of 12 per cent on the operating company's common stock equity ($245,000 on $2,000,000) magnified to 22 per cent on the holding company common stock equity ($165,000 on $750,000). In accordance with the principle of trading on equity, the latter return will shrink more rapidly than total earnings. Thus, a decline of the total return

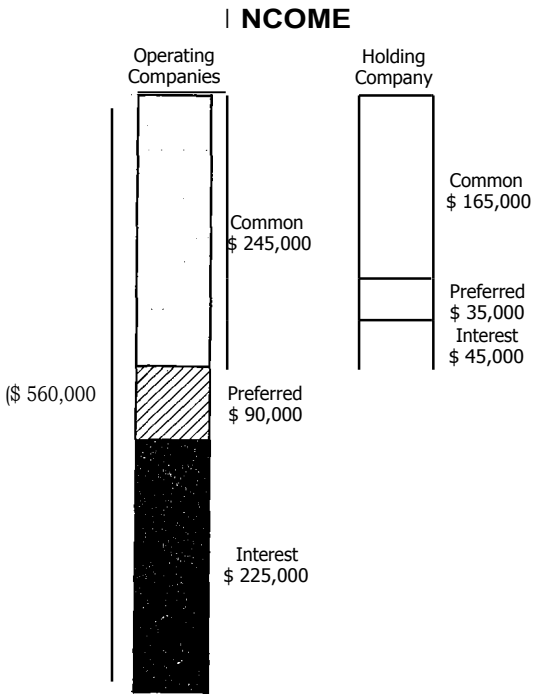

Figure 12. Illustration of Distribution of Income of Operating Companies Whose Common Stocks Are Owned by a Holding Company.

from 7 to 6 per cent would reduce the net balance for the holding company common by one half, to $85,000, and a decline of total return to less than 5 per cent would produce a deficit. The collapse of several pyramided utility empires in the early 1930's may be attributed at least in part to this factor.

The actual effect of changes in the earnings of the system on the holding company's securities may be seen by studying the consolidated income statements of the larger systems. In the following statement of the Commonwealth & Southern Corporation and subsidiaries it is seen that a decline of 22 per cent in gross earnings wiped out the earnings on the holding company's common stock.

THE COMMONWEALTH & SOUTHERN CORPORATION AND SUBSIDIARIES

Comparative Consolidated Income Account

(in millions)

	1930	*1933*
Gross earnings	$138.4	$108.5
Operating expenses, taxes, and depreciation	78.6	60.3
Other income	3.3	.6
Net earnings	$ 63.1	$ 48.8
Subsidiary companies—interest	18.2	22.9
Subsidiary companies—preferred dividends	13.2	14.3
Minority interest	.1	.0
Available to holding company	$ 31.6	$ 11.6
Holding company—interest	2.9	3.1
Holding company—preferred dividends	8.2	9.0
Earned on holding company common	$ 20.5	$ .5 (def.)

The possibilities of control of large properties with a minimum outlay and of a substantial rate of return on the controlling stock investment largely explain the popularity of the holding company device. However, the part that it has played can best be understood by tracing its origin and use.

Holding company origin—right of corporations to own stock.[9] Under the common law, American corporations have no inherent right to hold stock in another corporation; specific statutory permission is required. Prior to 1888, the right to own stock was either granted by special act of the legislature or held to be an implied power in the case of corporations which took stock in satisfaction of, or as security for, a debt, or where the holding of stock was incidental to their expressed powers. In some states corporations were permitted to purchase stock as a step toward merger or consolidation and to own stock of other companies doing a business ancillary to theirs.[10]

The most important examples of early holding, or parent, companies are the corporations which were granted the right to own stock by special acts of the state legislatures. As early as 1832 the Baltimore and Ohio Railroad Company was authorized to subscribe to the stock of the Washington Branch Road. Other companies

[9] See Bonbright and Means, *op. cit.,* Chapter III; "Power of a Corporation to Acquire Stock of Another Corporation," *Columbia Law Review,* February, 1931, p. 281; Federal Trade Commission, *op. cit.,* No. 69-A (September 15, 1934), pp. 183-195, and No. 73-A, pp. 8-9; R. C. Larcom, *The Delaware Corporation* (Baltimore: The Johns Hopkins Press, 1937), Chapter III.

[10] Larcom, *op. cit.,* pp. 53-55.

which received the privilege of stock ownership by special statute include the Pennsylvania Railroad Company in 1853 and the Chicago and Northwestern Railway Company in 1864. The pure holding company dates from 1868. Between that date and 1872 the Pennsylvania legislature chartered over forty of them by special acts.[11] These corporations were given unrestricted rights to hold and dispose of other companies' securities, and among them are to be found the ancestors of several important present-day corporations.

- The real history of the holding company as an important device for combination dates from 1888, when the State of New Jersey amended its general corporation law to make it possible for New Jersey corporations to include in their charters the specific power to hold stock in other corporations. In 1889, these provisions were classified and extended (for this reason, 1889 is often erroneously cited as the date of legal origin of the holding company), and in 1893 and 1896 they were amended and broadened still further." New Jersey soon built up a thriving business of incorporating new companies, and other states followed suit. Most of the early "trusts" were incorporated in New Jersey. At the present time, the laws of all but nine states permit one corporation to hold stock of another." In several other states, when there has been no express statutory prohibition, the state officers have permitted corporations to include in their charters the power to own stock. Modern corporate charters customarily include the power to hold securities of other companies.

"For the list, see Bonbright and Means, *op. cit.,* pp. 59-60.

"New Jersey practically repealed the section of its law empowering corporations to own stock in 1913, but in 1917, after the loss of incorporation business had been severely felt, restored it to substantially its original form. In the meantime, however, much of the business passed to Delaware. Of 92 pure holding companies with securities listed on the New York Stock Exchange (1928), 44 were organized in Delaware since 1910. Of 395 holding-operating companies, 148 held Delaware charters, most of them relatively recent; 121 held New York charters, most of them relatively old; and 87 held New Jersey charters, most of them taken out in the great combination period of 1898-1910. A. A. Berle, Jr., and G. C. Means, *The Modern Corporation and Private Property* (New York: The Macmillan Co., 1933), pp. 205-206.

" Ownership by a corporation of stock in other companies is unrestricted in 28 states (including Delaware, New York, and Illinois) and 3 territories. Alabama permits ownership only in the case of telephone and telegraph companies, and Kentucky allows it in cases where the controlled company is engaged in the same character of business. Seven states, including New Jersey, prohibit such ownership only when it tends to restrict competition or promote monopoly; New Hampshire forbids it only in the case of public utilities; Vermont permits it-only in the case of ancillary corporations, and and expressly prohibits holding companies; Wyoming permits stock ownership only in the cases of subsidiary or tributary companies; and the District of Columbia expressly forbids the purchase of stock of any other corporation.

For the holding company sections in the laws of each of the states and territories, see Federal Trade Commission, *op. cit.,* No. 69-A, pp. 183-195.

Railroad Holding Companies

Early railroad companies. We have seen that some of the earliest holding companies were organized in the railroad field by special acts of state legislatures, among them the Pennsylvania Company, which was chartered in 1870, and which is still an important part of the Pennsylvania system.[14] The device of stock control by exchange of securities or outright purchase was an important method of railroad combination and consolidation in the growth of the great integrated railroad systems. But it was not until the twentieth century that the pure holding company device was used as an instrument of control of widespread railroad properties.[15]

Types of present-day railroad holding companies. If by the term *holding company* all corporations owning stock of other companies are meant, we have examples today of superholding companies, holding companies, subholding companies, and parent companies. Most of the larger carriers would qualify as parent companies. The outstanding example of the superholding company is the Alleghany Corporation, top railway in the "Van Sweringen" system. Pure holding companies which are themselves controlled by superholding companies are illustrated by the Chesapeake Corporation in the "Van Sweringen" system. Then there are holding companies controlled by operating companies, such as the Pennsylvania Company, which is controlled by the Pennsylvania Railroad Company, and holding companies affiliated with operating companies by community of interest, such as the Pennroad Corporation in the same system.

Present significance of the railroad holding company. The use of stock control in the railway field has resulted primarily in the development of parent rather than pure holding companies, whereas the reverse has been true in the utilities field. This may have been due to the fact that the great railroad systems were already formed before the legalization of the holding company device, and to the fact that railroad combination usually requires the actual operating connection of large properties, so that outright fusion, lease, or the purchase or formation of operating subsidiaries has been more feasible. Furthermore, the Interstate Commerce Act did not obtain jurisdiction over the direct purchase of stock of one operating railway by another until the passage of the Transportation Act of 1920. When control over interrailway stock ownership developed, several

[14] Those interested in pursuing the subject of early holding companies in the railroad field will find convenient accounts in W. Z. Ripley, *Railroads: Finance and Organization* (New York: Longmans, Green & Co., 1915), Chapter XIII, and Bonbright and Means, *op. cit.,* Chapter IX.

[15] For histories of the important systems, including those in which the holding company has been used, see *Regulation of Stock Ownership in Railroads,* H. R. 2789, Part III, 71st Cong., 3rd Sess., 1931.

pure holding companies were formed, including the Pennroad Corporation, the Alleghany Corporation, and the Chesapeake Corporation. But railway mileage under the control of pure holding companies was, in 1930, less than 20 per cent of the total.[16]

Great concentration of control has very often taken place in the railway industry through other devices. If we consider the industry as divided into "systems" and "independents," the systems being composed of mileage of companies held together by community of interest, holding company or parent company control, lease, and outright fusion, we find that effective control of our second-largest industry is highly concentrated. In a 1930 study 14 major "systems" were found to include nearly seven eighths (86.3 per cent) of the mileage operated by the Class I railroads of the country.[17] Of these, the "Van Sweringen" system stood first with 28,411 miles, the Northern Pacific—Great Northern group second with 27,694 miles, and the Pennsylvania system third with 23,699 miles. The second of these was once dominated by a holding company. The first and third are characterized today by the use of the holding company device, although the latter has used other devices as

Regulation of railway holding companies. The Transportation Act of 1920 subjected railroad security issues to the regulation of the Interstate Commerce Commission and, in addition, required that proposed consolidations be submitted for the Commission's approval, so as to conform to the Commission's general consolidation plans." The use of the pure holding company avoided these controls, and this was doubtless a leading reason for the renewed appearance of the device after 1920, notably in the Pennsylvania

is Bonbright and Means, *op. cit.,* p. 228. Their calculations were based on figures contained in *Regulation of Stock Ownership of Railroads.*

In a study of the 573 corporations whose securities were listed and active on the New York Stock Exchange (1928), the holding company was found to be used as follows:

	Total	*Railroad*	*Public Utility*	*Industrial*
Pure holding companies	92	2	21	69
Holding-operating companies ..	395	44	13	338
Pure operating companies	86	0	3	83
	573	46	37	490

Source: Berle and Means, *op. cit.,* pp. 205-206.

"Regulation of Stock Ownership of Railroads, Part I, pp. lii-liii.

" For an analysis of the Pennroad Corporation and the Pennsylvania Company, see *ibid.,* Part II, pp. 632-817. See also *Investigation of Railroads, Holding Companies and Affiliated Companies,* Hearings on Senate Res. 71, 74th Cong., Part 18, *The Pennsylvania. Railroad System.*

" For a discussion of the regulation of railroad finance under the Transportation Act, see J. H. Frederick, F. T. Hypps, and J. M. Herring, *Regulation of Railroad Finance* (New York : Simmons-Boardman Publishing Co., 1930), Part IV.

and Van Sweringen systems. The Commission itself held that it could not prevent the control of an operating company by a pure holding company.[20]

The fact that the holding company device was used to circumvent the provision of the Transportation Act regarding railroad consolidations led to a movement, sponsored by the Interstate Commerce Commission, for regulation of the railroad holding company. A comprehensive survey of stock ownership in the industry was made in 1930,[21] and in 1932 and 1933 legislation was proposed to amend the Interstate Commerce Act so as to place the combination of railroad properties by all methods, including the pure holding company, under the jurisdiction of the Commission, and thus give the Commission full control over railroad unification.[22]

The Emergency Transportation Act of 1933 finally achieved this objective. Under Sec. 202 of that act, all forms of combination of operating companies, by direct acquisition, lease, voting trust, interlocking directorates, or stock control, must be approved by the Commission as being in harmony with and in furtherance of its plans for consolidation, and, in so far as necessary to promote these purposes, the combination is relieved from the operation of the antitrust laws.

Industrial Holding Companies

Early industrial holding companies. Before 1890, the chief rival types of combination in the industrial field were the trust, the community of interest, and outright fusion. The first of these appeared in 1879 with the formation of the first Standard Oil Trust, and for a few years the trust method flourished. But the common-law suits which dissolved the half dozen big industrial trusts in the period 1884-1890 forced the large businesses to elect another method of combination, and the relatively difficult fusion had to be resorted to until the legality of the holding company was definitely established. Even for some time after 1890, the uncertainty surrounding the holding company's fate as an instrument of monopoly kept it from being the choice of the big combinations.

However, after business began to recover from the effects of the disastrous panic of 1893-1897, the holding company began to come

[20] *Forty-Third Annual Report of the Interstate Commerce Commission,* 1929, pp. 80-82.

"Regulation of Stock Ownership in Railroads.

"See Regulation of Railroad Holding Companies, Hearings Before the Committee on Interstate and Foreign Commerce, House of Representatives, 72nd Cong., 1st Sess., on H. R. 9059, 1932, and *Recapture Clause of Transportation Act and Control of Holding Companies,* Hearings Before the Committee on Interstate Commerce, U. S. Senate, 73rd Cong., 1st Sess., on S. 843 and S. 844, 1933.

into its own. Its use by the Standard Oil Company of New Jersey in 1899 gave courage to the organizers of other combinations, and by 1904, before the Northern Securities decision, many large holding companies or parent companies were formed.[23]

In the ten years following the Northern Securities case, in which it was held that a holding company, when used to effect a monopoly, was not immune to the provisions of the Federal antitrust legislation, few industrial holding companies were formed.[24] The General Motors Company was organized as a holding company in 1908, but in 1916 it was reorganized as an operating company and absorbed its constituent companies by purchase of their assets, making them operating divisions. The passage of the Clayton Act in 1914, by which corporations engaged in interstate commerce were prohibited from acquiring stock control of other corporations similarly engaged where the effect was substantially to lessen competition between them, discouraged the use of the holding company device. More recently, the fact that industrial combinations have not been formed primarily for monopoly purposes, coup'ed with the restricted interpretation given the Clayton Act by the courts,[25] has encouraged the use of the holding company.

Present significance of the holding company in the industrial field. Bonbright and Means made a study of the 97 largest industrial corporations at the beginning of 1929.[26] Of the group, 21 were found to be pure holding companies; 5 were parent companies, primarily holding; 8 were parent companies, equally holding and operating; 59 were parent companies, primarily operating; and 4 were operating companies. Of the pure holding companies, 14 were formed between the years 1918 and 1929, whereas 36 of the big operating or primarily operating companies were formed before 1910, and only one, the Standard Oil of California, was formed after

[23] The following are examples: Federal Steel, 1898; Amalgamated Copper, 1899; American Agricultural Chemical, 1899; Crucible Steel, 1900; American Locomotive, American Can, American Smelting and Refining, Consolidated Tobacco, Eastman Kodak, and U. S. Steel, 1901; International Nickel, 1902; National Packing and E. I. du Pont de Nemours Powder Company, 1903; the old American Tobacco Company, 1904.

[24] The Northern Securities Company had been formed in 1901 to acquire the common stock of the Northern Pacific and Great Northern railways. On March 14, 1904, the company was ordered to give up its holdings in these two competing lines in one of the most prominent antitrust decisions made by the Supreme Court (228 U. S. 482).

[25] Examples of industrial holding and parent companies formed between 1914 and 1929 are Union Carbide and Carbon Company (1917), Sinclair Consolidated Oil Corporation (1919), Allied Chemical & Dye Corporation (1920), Drug, Incorporated (1928), and American Radiator and Standard Sanitary Corporation (1929). Drug, Incorporated, was broken up in 1933 by distributing its stockholdings in United Drug, Inc., Sterling Products, Inc., Vick Chemical, Inc., Bristol-Myers, Inc., and Life Savers Corporation to its stockholders.

[26] Bonbright and Means, *op. cit.,* pp. 76-78.

1920. These authors concluded: "It is therefore evident that, where not prevented by the Clayton Act, the holding company is the form which is usually employed to accomplish the large modern industrial consolidation." [27] Such a conclusion loses much of its force by failing to state the comparative importance of other forms of combination, particularly fusion, and by failing to note that subsidiaries may be employed, especially in the parent type of holding company, for legal or administrative reasons rather than as a combination device.

To discover the degree to which the pure holding company and the parent type are used by industrials at a later date and for a larger sample, a study was made of the 475 leading industrial corporations as of December 31, 1936. A classification of the group into three types showed that only 39, or 8.2 per cent, were pure holding companies, while 301, or 63.4 per cent, were parents, and 135, or 28.4 per cent, were pure operating companies.[28] The pure holding company was found to be a dominant type in no division of the whole industrial field, although it was well represented in the amusement, aviation, chemical, oil, steel, and sugar groups. The parent company type clearly dominated in the amusement, building, chemical, clothing, department store, food, fuel, office equipment, oil, packing and leather, pharmacy, railway equipment, lumber paper and pulp, and building groups. The only group in which pure operating companies were found to be numerically predominant was the chain store group, although it is well represented in all of the groups excepting amusement, chemical, food, oil, packing and leather, pharmacy, rayon, silk, sugar, lumber, and building.[2o] Comparative figures for the two studies are shown in Table 41.

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[27] *Ibid.,* p. 78.

[28] Companies having only a foreign subsidiary, or a sales, real estate, finance, or some other rather unimportant type of subsidiary, were classed as operating companies.

A numerical count of the three types of companies in the industrial field does not necessarily lead to the same results as would a division on the basis of assets, for, though one company may be the only holding company in the group, it may control half the assets of the group. This situation is found in the steel and iron group, where the United States Steel Corporation controls about 45 per cent of the assets of all iron and steel companies with investment of 50 millions and over, and yet is the only pure holding company. Twelve parent companies account for the other 55 per cent of total assets. There are 9 or 10 independent operating corr panies, all with assets of less than 30 millions. In the automobile and truck group, of 23 companies each with assets of 3 millions or over, only two, controlling less than 2 per cent of the total assets, are pure holding companies. Twelve parent companies control 67 per cent, and 9 independents control 32 per cent of the total assets.

[29] In another study it was found that in 1931, of the 209 industrial Delaware corporations with securities traded in on the New York Stock Exchange, 179, or 86 per cent, had one or more subsidiary companies. Of the 179, 142 were both operating and holding companies, while 37 could be classed as pure holding companies. Larcom, *op. cit.,* p. 70.

TABLE 41

COMPARISON OF Two STUDIES OF FREQUENCY OF OCCURRENCE OF HOLDING COMPANIES AMONG INDUSTRIAL CORPORATIONS

	Bonbright and Means' Study		*Authors' Study*	
	Number	*Per Cent*	*Number*	*Per Cent*
Pure holding companies.: ..	21	21.7	39	8.2
Parent companies:				
Primarily holding	51			
Operating and holding ...	8	74.2	301	63.4
Primarily operating	59			
Operating companies	4	4.1	135	28.4
	97	100.0	475	100.0

In order to discover whether there has been any significant shift away from the pure holding company type among the large corporations in recent years, a check was made on the classification set forth by Bonbright and Means as of 1929. It was found that, of the 26 companies with assets of 86 million dollars or over which these authors considered to be either pure holding companies or primarily holding companies, ten would now be considered parent companies, suggesting that the holding company may often be an intermediate step toward ultimate fusion.

The widespread use of the holding company in the industrial field appears to be due to its administrative rather than its financial advantages, for pyramiding through a chain of holding companies is the exception rather than the rule. Because industrial corporations do not use senior securities to the extent found in railway and utility companies, and because of the greater fluctuations of industrial company earning power, pyramiding is particularly expensive and dangerous in the industrial field. The benefits of decentralization of control and of legal and accounting autonomy, and the other administrative and legal advantages summarized later in the chapter, appear to be more important than the control of large properties through a small investment.

Utility Holding Companies

Early utility companies. While the use of the holding company in the utility field dates back to 1871, it has become the dominating method of control only since 1920.

The earliest utility holding company was the present Philadelphia Company, which now controls the gas, electric light, and traction companies operating in Pittsburgh, as well as a number of other subsidiaries. It was originally incorporated in Pennsylvania in 1871 as the Empire Contract Company, and it changed its name several times before reincorporating as the present company in

1884. It now forms part of the Standard Gas and Electric (Byllesby) system.

Another early electrical and gas holding company is the present United Gas Improvement Company, whose predecessor was formed in 1882 to introduce improvements in the gas industry. [30] In 1889 its assets were transferred to the present company, whose charter, granted by the state of Pennsylvania in 1870, similarly contained the unusual power to hold stock of other corporations. By purchase of the stock of gas and electric light companies in all parts of the country, the system has come to control assets of over three quarters of a billion dollars.

Other early electric !holding companies include the North American Company (1890) and the United Electric Securities Company. The latter was created in 1890 by the Thompson-Houston Electric Company, which was later consolidated into the present General Electric Company. The progenitor of the present American Telephone and Telegraph Company, the old American Bell Telephone Company, obtained its charter in Massachusetts in 1880.

Types of present-day utility holding companies. Utility holding companies may be divided into two classes: the parent, or holding-operating, companies and the pure holding companies. Most of the large operating utilities belong to the former group, serving contiguous territories through subsidiaries whose peculiar franchise and charter rights might be weaker if the corporate utilities were fused, or serving various states through subsidiaries. The outstanding example of the parent type is the American Telephone and Telegraph Company, which owns and operates toll lines and controls subsidiaries which provide almost the entire country with local service. The parent company also owns 98 per cent of the common stock of Western Electric Company, which is the manufacturing, supply, and warehousing organization of the Bell system. With consolidated assets of 4 billion dollars (after depreciation) and over 650,000 stockholders (of the parent company), the Bell system constitutes the largest nonfinancial corporation in the country in terms of total assets. [31]

The pure holding companies may be grouped into two main subclassifications: (1) those whose subsidiaries serve mainly smaller communities, and (2) those in which large cities are primarily served. In the first class are systems comprising widely separated properties as well as fairly contiguous networks. Middle West Corporation, Standard Gas & Electric Company, and Associated

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For a summary history of this group, see A. S. Dewing, *Financial Policy of Corporations* {New York: Ronald Press Co., 3rd rev. ed., 1934), pp. 858-862.

" See pp. 274277 for a summary of the methods of financing which have been used in the Bell system.

Gas & Electric Company are outstanding examples of nonintegrated groups. The Niagara Hudson Power Corporation, New England Power Association, and Columbia Gas & Electric Corporation groups comprise utilities which are for the most part in contiguous territory. The North American Company group is the best example of the large-city type.[32]

Still another way of classifying holding companies is to consider them as "superholding" companies formed to unite what were formerly independent holding company groups. Prominent examples are Middle West Utilities Company (now Middle West Corporation), through its purchase of three other holding company groups prior to its receivership, Standard Gas & Electric Company, and Associated Gas & Electric Company.

Subholding companies have been a feature of the large pyramided systems, and their use has greatly increased the possibilities of control with a small investment, as well as the risks of trading on the equity. Their main function has been to head geographical groups of operating companies and thus provide greater decentralization of management, or to centralize control of gas, electric, and other subsidiaries within a particular service group.

Utility holding companies may also differ with respect to the extent to which they supply their subsidiaries with services. Some, like American Telephone and Telegraph Company, receive income for services in addition to the dividends on their subsidiaries' stocks. In other groups, the management, engineering, financial, construction, and other services are supplied to the operating companies by special affiliated companies. Stone and Webster Engineering Corporation, owned by Stone and Webster, Inc., and Columbia Engineering Corporation, owned by Columbia Gas & Electric Corporation, are examples.

Present significance of utility holding company. Several attempts have been made to measure the degree to which the various branches of the utility field have become concentrated under the control of a relatively small number of groups. The earliest study of concentration of control in the electric group was made by the United States Bureau of Corporations, the predecessor of the Federal Trade Commission. The Bureau found that, in 1911, ten closely associated interests controlled 60 per cent of the commercial water power.[33] The Forest Service of the United States Department of Agriculture found that, in 1914, 85 electric utility corpora-

[32] For complete description of these and other large gas and electric holding company systems, see Federal Trade Commission, op. *cit.* Nos. 72-A and 84-A include convenient summaries. Bonbright and Means, *op. cit.,* Chapter V, describe the organization of some of the major systems.

[33] Report of the Commissioner of Corporations, *Water Power Development in the U. S.* (1912), p. 15.

tions controlled 68.6 per cent of total installed generating capacity, and that 18 corporate groups controlled 51 per cent of total water power." But local ownership and control characterized the industry until the War period.

However, the 'Federal Trade Commission found that, in 1924, 65 per cent of the electric capacity and output of the country was controlled by holding company groups, of which the General Electric group controlled 13 per cent and six other large holding company groups controlled 28 per cent.[35]

But the holding company form soon became even more important. On the basis of the quantity of electric energy generated, 16 large holding company groups were stated to control 80 per cent of the privately owned electric industry in 1929. In 1932 this percentage declined to 76 per cent, of which the United Corporation group had 20 per cent, the Electric Bond and Share group 14 per cent, and the Insull group 10 per cent. Thus these three large groups generated about 45 per cent of the tota1.[36] Forty-four holding company groups produced 66 per cent of the manufactured gas and 23 per cent of the natural gas in the country.[37]

In the telephone field, the American Telephone and Telegraph Company and its subsidiaries dominate the field, doing substantially nine tenths of the telephone business; the other tenth is divided among several thousand independent companies.

In the traction field, in 1930, pure holding company groups provided 31 per cent of the traction service rendered, measured by revenue passengers transported.[38]

Reasons for the holding company in the utility field. The major reasons that led to the large use of the holding company in the utility field may be said to be the following:[39]

"Federal Trade Commission, *op. cit.,* No. 72-A, p. 35.

" Federal Trade Commission, *Electric Power Industry, Control of Power Companies* (1927), pp. 36 and 37.

"Federal Trade Commission, *Utility Corporations,* No. 72-A, pp. 38-39. United Corporation held minority interests only and chooses to be known as an investment rather than a holding company. To this end it is currently disposing of sufficient holdings to avoid being classified as a holding company under the Public Utility Holding Company Act of 1935.

[37] *Ibid.,* pp. 47-48. Bonbright and Means, basing their calculations on gross depreciated assets, as derived from Moody's *Manual of Investments, Public Utilities,* concluded that in 1930 ten great groups of systems, controlled either by pure holding companies or by parent operating companies, did approximately three fourths of the electric light and power business of the nation and that 16 holding companies, most of which also do an electric business, controlled 45 per cent of the gas output of the country. *Op. cit.,* pp. 91-95.

"Ibid., p. 95.

"For a good summary of the advantages of the utility holding company, with many illustrations, and of the possible offsetting disadvantages, see Federal Trade Commission, *Utility Corporations,* No. 72-A, Chapter XI.

1. *Operating economies.* Through centralized management and supervision, problems of a legal, engineering, accounting, financial, or operating nature can be handled by expensive but competent experts. The cost is made reasonable by spreading it over a large volume of business. Economy can be furthered by group purchases of supplies and equipment. Interconnection of operations permits the construction of larger and more efficient plants and makes for a more regular volume of business.

2. *Easier financing.* Not only may the senior securities of operating companies sell to better advantage when the company is a subsidiary of a well-known system but also the holding company may supply the much-needed junior, or common stock, money. Large metropolitan companies, like Consolidated Edison, Commonwealth Edison, and Southern California Edison, were able to meet the need for junior money by frequent offerings of rights to their stockholders during the 1920's, but lesser operating companies were not well enough situated to care for their considerable needs. The popularity of holding company securities solved this problem.

3. *Profits for controlling interests.* Because of rapid growth during the 1920's and the huge sums involved, the utility industry, particularly the electric division, offered large profit possibilities to promoters of combination, to investment bankers, and to engineering and equipment interests. For this reason, the holding company, giving a maximum of property control for a minimum of investment, was most attractive. While these parties often performed a useful function, their controlling position meant that they were not dealing at arm's length with their subject corporations. The obvious abuses which inevitably arise where a dual relation of this sort exists explain the criticism and reform movement of the 1930's.

Utility holding companies in the depression of 1930-1935. In spite of the use of pyramiding in a number of holding company systems, actual failures during the depression of the early 1930's were relatively few. The most spectacular was the Insull crash, which involved the receivership of (1) the two top finance companies, Insull Utilities Investments, Inc., and Corporation Securities Company of Chicago; (2) Middle West Utilities Corporation, the major superholding company; (3) National Electric Power Company, one of Middle West's subholding companies; (4) National Public Service Corporation, the latter's sub-subholding company, and many other companies of this group. The extent of pyramiding in the Insull group is indicated by the fact that the system sometimes stretched through eight layers from the top finance companies to the lowliest operating company. For example, starting with the West Florida Power Company, an operating com-

pany, in direct line from the top, and calculating the proportion of interest in each company held by the one directly above it, it was found that the percentage of the book investment, as measured by total securities of the operating company owned by the top finance companies, amounted to one tenth of one per cent as of December 31, 1930.[40]

Other large holding companies which experienced such financial distress as to require a reorganization of their debt structure include Utilities Power and Light Corporation, Standard Gas and Electric Company, Central Public Service Corporation, and Tri-Utilities Corporation. These differed from the Insull group in that only the top company was involved. When the earnings of the operating subsidiaries declined even modestly, the net income available to the successive companies up the pyramids dwindled in much greater proportion, so that the top companies, with a claim on earnings many times removed, were forced to default. Other holding companies have been forced to allow preferred dividends to accumulate, so that their efforts to raise funds for subsidiary financing may be crippled.

More conservatively financed and managed holding companies, such as North American Company and American Gas and Electric Company, while not immune to the effects of the depression, enjoyed earnings sufficient to cover their interest and preferred dividend charges, and by their financial results refuted many of the objec tions which had been raised against the holding company as such. Some holding companies, like Consolidated Edison of New York and Pacific Gas & Electric Company, control a single integrated business and are financed along lines more typical of the operating company, whose results they have paralleled during the depression. The performance of such companies suggests that it is not logical to condemn the holding company *per se*. The problem is to eliminate the abuses which have crept into its use in some cases and to preserve the advantages it may bring to the public as well as to its owners.

The Public Utility Holding Company Act of 1935.[41] The abuses to which the electric and gas holding company had been put in some instances, and the collapse of some of the top-heavy systems during the depression, led to the passage of the Public Utility Holding Company Act of 1935, which placed electric and gas holding companies under the supervision of the Securities and Exchange

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[40] *Ibid.,* p. 160.

[41] The "Public Utility Holding Company Act of 1935" comprises the first part (Title I) of the "Public Utility Act of 1935," Public No. 333, 74th Cong. Title II is called the "Federal Power Act."

Commission. Only a very condensed summary of the leading features of the act is presented here. [42]

I. Public utility holding companies (as defined by the Act)" and their subsidiaries are declared to be affected by the national interest. The abuses in holding company management and control require regulation of the device and simplification of the corporate groups which the holding company dominates.

2. All holding companies are to register with the Securities and Exchange Commission, stating details of organization, financing, and control.

3. The Commission is given the following powers:

(a) To approve the issuance of securities by holding companies and their subsidiaries. No-par stock, nonvoting stock, preferred stock, and unsecured bonds are banned, unless the Commission sees fit to approve them.

(b) To approve the acquisition of subsidiaries.

(c) To examine holding company structures and require the simplification of any utility pyramid into a single geographically integrated system, with only one intermediary company allowed between the top holding company and actual operating subsidiaries." The Commission is given considerable latitude in the application of this provision.

(d) - To control intercompany transactions involving loans, sales of securities, management, service, and sales and construction contracts.

(e) To require periodic reports and prescribe accounts, records, and specified statements.

The results of the Act cannot be determined as yet, but it is clear that they will depend mainly on the interpretation of the provisions of the Act and the liberality or strictness with which the Commission applies those provisions. On March 28, 1938, the Supreme

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For a more detailed examination of the Act, see E. D. Ostrander, "The Public Utility Holding Company Act of 1935," *Journal of Land and Public Utility Economics,* February, 1936, p. 49. Pros and cons were brought out in Hearings Before the Senate Committee on Interstate Commerce, 74th Cong., 1st Sess., on S. 1725, 1935, and in Federal Trade Commission, *Utility Corporations,* No. 73-A. Complete information on the Act and Commission action under it may be found in Prentice-Hall, Inc., *Securities Regulation Service,* Vol. 2.

" See p. 606 for the definition of "holding company" in the Act.

" For a discussion of the reasons why the Act requires the partial dismemberment of holding company groups under the "death sentence" clause, and suggestions as to methods of reorganization and dissolution to comply with this clause, see L. T. Fournier, "Simplification of Holding Companies Under the Public Utility Act of 1935," *Journal of Land & Public Utility Economics,* May, 1937, p. 138.

Court reviewed the Act with respect to the registration clause and found the clause to be constitutional, sustaining an order of the Federal District of New York Court requiring the holding company involved and its associated holding companies to register with the Commission or else be denied the use of the mails and other facilities of interstate commerce. Following this decision, the holding companies affected by the Act have taken steps to register.

The status of the "death sentence" clause-3 (c) above—of the Act was not determined by this test case, but the Commission has recently made its first move in applying this section. In August, 1938, hearings were begun on the question of the integration of the Utilities Power and Light Corporation system. Selection of this group was appropriate for two reasons: (1) The holding company was being reorganized under Section 77B of the Bankruptcy Act, and the question of chopping up the group could be considered along with the reorganization plans; (2) the Utilities Power and Light group, with scattered properties in 580 communities in 24 states and Canada, is the sort of system against which the, Act is presumably aimed.

Abuses of the Holding Company Device

With the foregoing historical sketch of the holding company's use in mind, we are ready to summarize, on the one hand, the chief abuses and, on the other, the chief financial and other advantages. The abuses to which those in control of holding companies are alleged to have put the device have been the subject of countless articles, books, and governmental investigations, and to discuss them fully here would lead us far afield. Our purpose will be served by a brief discussion of the more flagrant abuses, especially those attributed to utility holding companies, which led to the passage of the Public Utility Holding Company Act of 1935. [45]

[45] For discussion of these abuses, see, in addition to the innumerable periodical articles appearing in the period 1930-1935, the following books and public reports: Bonbright and Means, *op. cit.,* pp. 153-187 and Appendix A; W. Z. Ripley, *Main Street and Wall Street* (Boston: Little, Brown and Co., 1927), Ch. X and XI; Massachusetts *Report of the Special Commission on Control and Conduct of Public Utilities* (Boston, 1930) ; New York State Commission on the Review of the Public Service Commission Law, *Reports and Hearings* (Albany, 1930). Federal Trade Commission, *Utility Corporations,* reports on electric and gas utilities. No. 72-A (June 17, 1935) contains a review and summary of the facts presented on the investigation of electric power groups up to the middle of 1935, and includes, in the last chapter, a discussion of the advantages and disadvantages of utility holding companies to the public. No. 73-A (January 28, 1935), Chapter XIV, again summarizes the questionable practices revealed by the preceding volumes. No. 84-A (December 31, 1935) summarizes the results of the study of gas companies, with conclusions and recommendations.

Regulation of Stock Ownership in Railroads and *Regulation of Railroad Holding Companies* deal with the scope and abuses of the holding company device in the railroad field.

Growth of unwieldy and uneconomical systems. Widely separated properties that offered small likelihood of integrated operation or effective utilization were sometimes bought up apparently for the profit possibilities to the promoters and at exorbitant prices. As we have seen, the Public Utility Holding Company Act of 1935 is aimed in part at breaking down the great, sprawling type of nonintegrated gas and electric system.

Stock watering and inflation of capitalization. The purchase of subsidiaries' stock at excessive prices tends to cause capital inflation. In the rivalry among holding companies for growth during the 1920's, prices paid for the controlling stock of subsidiaries were often far above the book value. The holding company would then issue its own securities on the basis of the cost of the subsidiaries' stock. The justification offered was that the earnings of the subsidiaries would greatly increase as a result of the superior management of the holding company.

The more flagrant type of capital inflation has occurred when the assets of the subsidiary have been revalued or written up to form the basis of larger subsidiary capitalization.[46]

Whether the inflated capitalizations of the operating and holding companies have resulted in higher rates to customers has been the subject of considerable controversy. On the one hand, it is pointed out that the operating company's rates are regulated so as to provide a fair return on the fair value of its property and not on its capitalization. As for the capitalization of the holding company, it is of no interest to the commission regulating the rates. On the other hand, it is argued' that the commission is under pressure to maintain earnings, particularly for bond interest, and may thus give indirect weight to actual capitalization of an operating company. A heavily capitalized holding company system is also deemed less likely to make voluntary rate reductions, which might in the long run benefit both company and public.[47]

Another unfavorable result of the excessive security issues which have sometimes been built on top of the subsidiaries' earnings is the

"The Federal Trade Commission claimed that the capital assets of 18 top holding companies, 42 subholding companies, and 91 operating companies examined in its investigation were written up in value 9.6 per cent, 16.5 per cent, and 22.1 per cent, respectively. *Utility Corporations,* No. 72-A, p. 299-302. However, Dean Madden questions this claim, on the grounds that the Commission does not disclose what it regarded as a "write-up." John T. Madden, "Write-Ups: Do They Affect Rates?" *Annals of the American Academy of Political and Social Science*, January, 1939, p. 64.

"This position was taken by the Federal Trade Commission on the basis of its study referred to in the previous footnote, and was also taken by Bonbright and Means *(op. cit.,* pp. 163-170). Dean Madden objects on the grounds that other studies have come to an opposite conclusion *(op. cit.,* p. 66) and that state regulatory bodies give no weight to increased ledger values in setting rates (pp. 68-72).

neglect of operating company maintenance, inadequate depreciation allowances, and a niggardly retention of earnings for improvements, which, in the absence of the pressure to provide dividends to the holding company, might be handled more conservatively.

The creation of top-heavy capital structures. We have seen that the holding company device lends itself to pyramiding of capitalization, especially in the public utility and railroad fields, where it is customary to obtain a large part of the funds of both operating and holding companies by the sale of bonds and preferred stock, permitting both control and possibly high earnings through ownership of the voting stock only. The piling up of many corporate layers through the use of the subholding and superholding company increases the risks of trading on the equity. The abuse lies not in the fact of pyramiding but in the encouragement it gives to poor management, to exaggerated profits, to the disbursement of unearned dividends, and to the concealment of the extent of the pyramiding from the buyers of securities, who, because unskillful, may not be aware of the fact that they hold claims many steps removed from the actual operating properties. The requirements of the Federal Securities Act and of the Public Utility Holding Company Act should go far to reveal the true status of the holding company securities."

Management of operating companies for the benefit of the holding company. Since the holding company is dependent on net earnings of the operating company for its own revenue, it may manipulate the affairs of the subsidiary so as to provide the highest returns to the controlling company. Pressure is particularly great when there are several layers of companies, each with bonds outstanding, so that earnings must be passed on through layer after layer of corporations to prevent financial failure. Neglect of subsidiaries' maintenance and depreciation, forcing subsidiaries to make unfavorable sales and lease contracts, forced consolidations and dissolutions within the group, and excessive payment of dividends are types of abuses which may result from the need of pushing earnings toward the top of the structure."

"Industrial holding company groups are not as a rule pyramided to any great extent. Most of the cases are found in railway and utility financing. In a utility pyramid containing five layers of companies, the bonds of the top company may actually be ninth in line in sharing the earnings of the system, if there are both bonds and preferred stock outstanding for each layer. However, the diversification of investment in the pyramid may compensate in part for the risks of trading on the equity.

See Federal Trade Commission, *Utility Corporations,* No. 72-A, Chapter IV, for discussion and examples of pyramided utility holding company structures.

" For a discussion and examples of inadequate depreciation among the utility companies, see Federal Trade Commission, *Utility Corporations,* No. 72-A, pp. 496-512, 849-851.

The holding company may use its richer subsidiaries as a source of funds when its own credit is poor, borrowing from them either cash or securities. Such an intercompany obligation is not revealed by a consolidated balance sheet. It is termed an "upstream" loan and is deemed an improper use of the control over the operating utility; registered holding companies are forbidden its use under the Public Utility Holding Company Act of 1935.

Similarly, the holding company would be abusing its controlling position if, in lending to a subsidiary, it attempted to give itself a lien ahead of existing creditors. "Downstream" loans are allowed under the Public Utility Holding Company Act, but they must pass the scrutiny of the Securities and Exchange Commission and so must follow fair financial policies.

Manipulation and secrecy of accounts. The holding company controls the accounting procedures of its subsidiaries (subject to regulation of the state commissions for operating subsidiaries), and, in so doing, it could in some cases manipulate them for its own benefit. Accumulation of secret reserves, granting of favorable contracts to related companies, manipulation of depreciation, improper handling of maintenance and construction accounts, suppression of the financial condition of weak subsidiaries, and other devices might be used to the advantage of the parent company. However, the present requirements of the Securities and Exchange Commission for complete publicity of individual and consolidated accounts of interstate holding companies should remove this type of abuse.

Excessive service and other charges. The holding company, either directly or through its management affiliate, may add to its dividend income by charging its subsidiaries excessive fees for operating, engineering, construction, accounting, legal, and financial services. Such charges would increase the operating expenses of the subsidiaries and constitute a claim prior even to their bond interest and preferred dividends. In the utility cases these costs are covered by rates made to assure a "fair return" on the "fair value" of property of the subsidiaries." Sound practice now holds that these charges should be limited to their actual cost and contain no element of profit.

Profits on intercompany transactions. Intercompany sales of products, property, and securities may be made at excessive prices, either to keep down the apparent profits of the more successful companies or to increase the earnings of the companies badly in need of them."

" For a discussion of the use of service charges in the big utility groups, see Federal Trade Commission, *Utility Corporations,* No. 72-A, Chapter IX.

" *Ibid.,* No. 72-A, pp. 851-854, 864-866.

Manipulation of stock market prices. Some public utility holding companies have been charged with market manipulation of their stock and with obtaining high prices for security issues marketed through affiliated sales companies.

This list of abuses, on which the voluminous reports of the various public commissions have elaborated, suggests why railroad holding companies have been placed under the control of the Interstate Commerce Commission, why gas and electric utility holding companies have been specially dealt with in the Public Utility Holding Company Act of 1935, and why even the well-regarded American Telephone and Telegraph system has recently been subjected to a special Federal investigation. It should be clearly understood, however, that not every holding company has been guilty of these abuses. That would be far from the truth. Lest the reader gain too dismal a picture of the holding company, he should remember that virtually any instrumentality may be misdirected and that the fault most often lies in the user.

Comparison with Other Forms of Combination

We turn now to the comparative advantages of the holding company that explain its use. Its formal and permanent character make it clearly unlike such informal combination devices as the pool or the community of interest (Chapter 23). Rather it falls into a class with the more durable relationships effected by the trust, the lease, and fusion.

Holding company versus trust. The trust differs from the holding company in that the controlling voting stock of the several operating companies is held by a board of trustees instead of by a holding company. The trustees may be changed only with difficulty, whereas the directors of the corporation are subject to the customary annual election. Certain risks may attend the use of debt by a trust. But to a large extent the two devices are similar. For a fuller comparison, it is necessary only to review the material on the trust and corporate forms of organization previously covered (Chapters 1 and 2), noting that in this case neither organization would have any operating function but would only hold certain voting securities and so be purely financial in character. Certainty about the absence of personal liability for management and owners and about the legal status in the various states has given the corporation its leadership over the trust as a combination device.

Holding company versus lease. Whereas the holding company keeps its subject corporations alive and operating in a state of nominal independence, the lease results in the absorption of property and operations of the subject corporation into the system of the lessee, leaving the lessor corporation as a dormant shell to col-

lect rent and distribute it among its security holders. The lease arrangement is advantageous when completely unified operation is sought or when the lessee wishes to avoid any cash investment but is in a position to assume fixed charges sufficient to satisfy all of the investors, including the stockholders, of the lessor corporation. Rent can be variable or contingent, but the almost invariable practice has been to make it a fixed charge.

The holding company has the advantage over the lease whenever it is desirable to keep the property and business of a subject corporation in an independent corporate compartment for legal, regulative, administrative, or financial risk reasons. A sick property owned by a subsidiary can be easily severed from the system; if it is held under a lease, it can be removed only by admitting insolvency and submitting to reorganization. Independent financing for the unit in question is easy under the holding company setup; it is difficult when attempted after a lease has been effected. The acquisition of control requires an investment by the holding company, but it may be effected by purchase of voting control, whereas a lease of all property will usually require the consent of a maj ority or more of the stockholders, sometimes including groups of security holders that are ordinarily nonvoting.

In general, the long-term lease as a device for combination has been limited to the railroad field. Even here its use is diminishing. The disadvantage of considerable fixed charges in an industry that is none too prosperous argues for a continuance of this trend.

Comparison of holding company and fusion. The various factors that may influence management in its choice between the creation or continuance of a holding company arrangement and the fusion of the given business units into a single corporate organization may be outlined at this point. In any given business situation, a choice must be made upon the basis of the relative importance of several factors pertinent to that particular case.

1. *Financial factors:*

(a) *Relative ease of financing.* If the problem is to acquire control of an already existing business, the simplest procedure may well be to acquire the desired stock either with free cash or authorized but unissued securities. The purchase may be made in the open market or by negotiation with the holders of a controlling stock interest. Formal action or consent by the stockholders of either corporation is not required.[52] Fusion would require negotia-

[52] Directors may, as a matter of self-protection or as a matter of policy, submit the purchase to stockholders. Thus, the stockholders of the Celotex Corporation were asked to approve the purchase of a minority interest in Certain-teed Products Corporation, which was to be paid for in stock (1938).

tion between the directors of the two corporations and the formal consent of the stockholders of at least the merging corporation.

If the problem is to finance a new or even an existing division of the business which would enjoy special advantages in offering its own securities, particularly senior obligations, to the public, separate organization of a subsidiary is logical. Thus, cheap borrowing may be had by a manufacturing corporation through a real estate subsidiary that owns an office or merchandising building.

(b) Taxation. Taxation is the most tangible burden involved in maintaining extra corporate organizations. At present the holding company is obliged to pay the regular corporation income tax upon 15 per cent of the dividends it receives from subsidiaries, although that income has already been subject to this same tax. There will also be the other corporation taxes, both Federal and state, which have to be borne twice—once by the operating company and again by the holding company. However, in the matter of state taxes, several subsidiaries may have an advantage over a single operating company because each of the former can adapt itself to the local method of taxation. Thus, when a state taxes a "foreign" corporation on a fraction of its capital equal to the fraction which sales within that state bear to total sales, the single consolidated corporation might pay a substantial amount, even though the actual property used in that state might be negligible. A distinct subsidiary corporation would be subject to a smaller and more equitable tax based upon actual property owned by it within the state. Other savings in taxation might appear when incorporation was through a number of subsidiaries, each designed to meet the peculiarities of local corporate and business taxes. The inevitable expense of the "extra" corporation may be kept relatively small by incorporation of the holding company in a suitable state.

(c) Expenses of separate corporate organizations. In addition to the taxes already mentioned, the costs of special corporate records, of directors' meetings, of stockholders' meetings, and of reports to the state must be weighed. Such expenses are relatively most burdensome when the unit thus separately incorporated is small, and they diminish in importance as the unit becomes larger. Moreover, if the unit is large, directors' meetings and special accounting reports will represent valuable and necessary activities that would find their counterparts in divisional staff meetings and divisional financial reports under a consolidated corporation. Furthermore, the salaries of officers of subsidiaries should be counted an extra cost only to the extent that the officers do not perform operating functions commensurate with their compensation.

(d) Insulation against liabilities of subsidiaries. This protection is one of the possible advantages of the holding company over

complete fusion.[53] It may be significant (1) when unusual indebtedness is incurred by some division of the business, (2) when unusual risks or fluctuations in earnings are likely, or (3) when there is merely some element of uncertainty to be guarded against, as in a foreign branch or a type of business subject to regulation.

(e) Ease in the separation of an unprofitable unit. The separation of an unprofitable unit is easiest when the unit is organized as a separate subsidiary rather than as a department of a single business. Examples are found in the depression experience of certain merchandising corporations, which conducted their real estate operations through independent corporations. In a case of this kind, the failure and receivership of the real estate corporation did not necessarily involve the whole organization in financial disaster. Similarly, public utility systems have isolated the bad effects of losing operations in the traction, oil, and ice businesses by this device. Such isolation of the unprofitable does not prevent financial assistance when conditions warrant but permits abandonment of the unit when desirable. The clear-cut independent corporate existence may also encourage those in control to be more firmly judicious in their decision to halt unprofitable operations than they would be if the losses were incurred by a departmental unit.

(f) Relative ease of financing. A holding company and a consolidated system are likely to be on a parity in the comparative cost of their financing when the various parts of each are reasonably sound. Sometimes a fused system will have the advantage by virtue of its ability to offer one large bond issue with a mortgage lien, whereas the holding company system can offer similar security only in the smaller, and so more expensive, bond issues of its several subsidiaries. In some cases, however, specialized subsidiaries might enjoy better standing than would the consolidated parent company.

Should some branch of operations become very unprofitable, a holding company system may enjoy an advantage over a single consolidated corporation. The isolation of profitable and unprofitable divisions into separate subsidiary compartments may permit the former to raise funds through their own security issues, either for cash or for property. Such a possibility would be most important if profitable growth opportunities existed in certain divisions of the business or if funds were needed to meet some emergency. This possibility is one phase of the insulation feature already mentioned; should the unprofitable subsidiaries be aban-

[53] However, courts may disregard the legal distinction between the parent and subsidiary companies when their operations are completely merged in practice. See R. N. Owens, *Owens on Business Organization and Combination* (New York: Prentice-Hall, Inc., rev. ed., 1938), pp. 127-133.

doned, the consolidated picture of the holding system itself would be restored to a healthy appearance.

2. *Administrative factors:*

(a) *Degree of centralization desired.* From the standpoint of administration, the holding company system lends itself to decentralization of executive responsibility, whereas fusion leads to centralization. It is true that a single corporation can set up a decentralized arrangement along divisional lines, but executive officers of a subsidiary corporation are likely to regard their responsibility as greater and their power to initiate and execute policies larger than they would if they were only divisional heads.

Factors that favor decentralization and therefore the holding company are as follows:

(1) Different lines of product, particularly those which require different methods of marketing and therefore management with different types of experience or methods of operation.
(2) Differences in territory which create special problems that are best handled by local executives.
(3) Competition which creates frequent nonroutine problems requiring prompt action that is best handled by a decentralized system.

The core of the problem of administrative centralization is found in the last point made. To the extent that operations can be made uniform and routine they lend themselves to supervision of a highly centralized character; to the extent that operations are variable and require independent judgment and prompt action, delegation of authority is essential.

The preference which some have for an executive title in a smaller corporation over a "manager's" or "superintendent's" position in a larger corporation should be considered. Such a preference, which is wholly aside from money compensation, might be regarded as a human weakness. But weakness or not, if it is an incentive to action, the sole question is whether or not the cost of creating such titles is more or less than the added administrative efficiency.

(b) *Coordination of operations.* Close coordination of operations is more difficult under the holding company system than under a single corporation. In the horizontal type of combination, coordination is most likely to be necessary when the several divisions might otherwise come into active and wasteful competition; it is least necessary when markets are distinct or noncompetitive. When the purpose of combination is to bring together noncompeting products and obtain economies through the use of a single selling channel ("circular" combination), coordinated activity is clearly essential. In the vertical type of combination, coordination is most

necessary when substantially all of the production of a given unit is absorbed by other divisions of the organization; it is least necessary when an important portion of the business is with outsiders.

3. *Legal factors:*

(a) Need for localizing effect of state restrictions or regulations by use of separate companies. It is often simpler for a distinct corporate unit, a subsidiary, to deal with regulatory authorities or meet special local conditions than it is for a large corporation. If regulation is oppressive, it is easier to prove the point at issue when the operating figures are not merely a part of those of a large and possibly prosperous company. In this connection, the accounting publicity attendant upon such regulation may be less expensive and extensive, may avoid an airing of information to competitors, and possibly may be less subject to attacks that make for public ill will, if it is limited to a single division of operations isolated into a subsidiary. A single operating company might be obliged to report much detail about all parts of its business by a regulatory body concerned only with a fraction of its operations.[54]

(b) Relative ease in divorcing properties in the event of anti-trust or other Government action. In the case of an adverse anti-trust decision, the severance of a particular property would probably be less disruptive to efficient operation under a holding company than under a single integrated company.

4. *Public relations and goodwill:*

When products are of a very similar character and are marketed through similar channels, the use of a single corporate name supported by institutional advertising may be valuable, especially if it has been used from the beginning But, if valuable goodwill has already been built up around various corporate names, it may pay to preserve this intangible property by continuing the several corporations as subsidiaries. Moreover, if certain parts of the business are the subject of public ill will through regulatory, political, or other factors, there is the risk that all parts of the business may be injured by the close physical union in a single consolidated corporation. Another intangible which may make the preservation of a corporation desirable is the ownership of franchises or special charters, which are not readily transferable.

"In order to gain exemption from the regulatory provisions of the Public Utility Holding Company Act, Cities Service Company transferred the voting stock of Cities Service Power and Light Company and of certain natural gas subsidiaries to trust companies (1939). Similarly, the International Hydro-Electric Co. turned over to voting trustees the 88 per cent of New England Power Association's voting stock which it owned.

Conclusions. The more obvious factors—the costs of taxation and duplication—weigh in favor of fusion and against the more complex holding company–subsidiary structure. The less tangible factors—financial, administrative, legal, and goodwill—may be equally significant, or even more significant, to long-run profits. The costs of maintaining separate corporate organizations are relatively most burdensome when the units are small. As the size of the operating units grows larger, these costs tend to shrink in relative importance. Moreover, the possible gains from more effective executive action or the protection against certain hazards that can arise from putting all the business eggs in one corporate basket, become more important. To the extent that separate corporations safeguard the property investment against possible future losses by (a) protecting against liabilities of subsidiaries, (b) protecting future financing, (c) shielding against legal hazards in various relations with the Government, particularly in regulatory matters, or (d) protecting goodwill, then the added costs should be regarded as an insurance premium. Its significance should be judged not as an absolute amount but in relation to the hazards insured against.

The holding company has served two functions: first, to effect combinations, and, second, to divide a business into legal and financial compartments. If only the former purpose is present, the holding company is a temporary instrument that will lead to fusion. In the second capacity the subsidiary divisions serve to segregate unlike businesses or different operating functions, such as owning real estate, financing, and selling; to meet the special problems of taxation and regulation both in the various states and in foreign countries; to attract local capital; and to preserve goodwill. With such a variety of possibilities, the wisest course is to examine each situation that has given or might give rise to a separate corporation and then to estimate as closely as possible the costs and gains on the several points outlined. Such an individual checkup would be likely to give proper weight to the personal and other intangible elements that often have a large bearing on efficiency and profits.

CHAPTER 26

REFINANCING AND RECAPITALIZATION

Introductory

Types of capital structure change. In addition to the changes which result from the ordinary financing of growth, either through a sale of securities or the retention of earnings, there are three varieties of change:

1. *Refinancing,* which involves the sale of securities to retire existing obligations.
2. *Recapitalization,* which covers change in the form and amount of outstanding securities through voluntary exchange. These exchanges are designed to improve the capital structure. Slow changes, such as may be brought about by conversion of prior issues into common stock, are not ordinarily thought of as "recapitalization," although in the broad sense they would fall within the scope of the definition. In the same broad sense, refinancing and reorganization result in recapitalization, but they are not ordinarily included under that term.
3. *Reorganization,* which covers those forced changes in capital structure that are brought about as a result of actual or threatened insolvency.[1] Such drastic changes are ordinarily accomplished during receivership or bankruptcy. The subject of reorganization is treated in Chapter 28; the matter of refinancing and recapitalization is discussed in this chapter.

Refinancing

Types of refinancing. This group of capital structure changes consists of the relatively routine financing of the ordinary corporation. Such financing may be for the purpose of changing debt to a more suitable or convenient form, reducing rates of return paid upon either bonds or preferred stock, or achieving a better balance among the several types of securities in the capital structure. Since most of these problems have been discussed in preceding chapters, little more than listing is required at this point.

[1] In law, certain forms of recapitalization are called *reorganization,* an important point to keep in mind in discussing taxability of certain transactions for the holders of the securities exchanged.

1. Funding. If the credit of a corporation is sufficiently strong, and the market will absorb its securities at favorable prices, it may relieve itself of an embarrassing load of current debt from the proceeds of the sale of bonds. The process of converting short-term into long-term debt is known as *funding.* For example, in 1935 the Anaconda Copper Mining Company took advantage of the very low rates in the bond market to issue $55,000,000 of 41 per cent sinking fund debentures and used the proceeds to fund $41,225,000 of its own bank loans and $11,000,000 bank loans of two of its subsidiaries. Anaconda's success in funding its floating debt was due to the sharp increase in its earnings in the recovery period and to the favorable bond market. Had the company not been able to refinance, its position would have shown a proportion of current liabilities practically equal in amount to its current assets.

Such a conversion of current to fixed liabilities makes for a stronger financial position. But funding is of course logical only when assets and earnings are adequate to support the more permanent debt and the increased fixed charges.

2. Refunding. Often bonds are called for redemption and paid off from the proceeds of new bond issues. This process is called *refunding.* The most common objective in such cases is the reduction of interest cost. Sometimes the purpose is to eliminate issues that might interfere with new financing, such as an issue of closed mortgage bonds, especially if they contain an after-acquired-property clause, or bonds with other burdensome provisions, such as a heavy sinking fund.

3. Other refinancing. Either bonds or preferred stock may be called and refinanced by a sale of common stock. Such a move, unless favorably timed, may dilute the profit possibilities of the common in return for the safety that follows the elimination of trading on equity. Sometimes the safety motive leads to the refinancing of bonds with an issue of preferred stock. More rarely a preferred stock may be refinanced through a sale of bonds, but the saving in charges which such a move may bring is ordinarily not regarded as worth the added risk unless the corporation's financial strength is exceptional.

Recapitalization

Types of recapitalization. Recapitalization occurs when, instead of financing, the company merely revises its capital structure by inducing holders to exchange their existing securities for new ones on a voluntary basis. The more common forms of recapitalization are as follows:

1. *Change in the capital stock account.* The simplest rearrangement involves only a change in the form of the outstanding

stock. When the par value or the stated value of stock without par value is reduced, a transfer is made from the Capital Stock account to the Capital Surplus account. Sometimes capital surplus is created in this manner when par-value stock is changed into no-par stock. Such a change may be merely a formal change having a certain tax advantage (see pp. 21 and 52) or may accompany a split-up, as described below. Surplus may be deliberately created as the primary end of this move, however, for such purposes as (a) to offset an accumulated deficit in the Earned Surplus account, which would improve the appearance of the balance sheet and permit the company to pay dividends from current or subsequent earnings; (b) to offset a writedown of asset values, particularly fixed and intangible assets; and (c) to make possible the establishment of reserves.

If a deficit exists in the Surplus account, or is about to be realized, the surplus created may be used to offset it or prepare for it. Thus in 1934 the stated value of the common stock of the General Outdoor Advertising Company was reduced from $20 to $10 per share, and the surplus thus created was used to offset an operating deficit of $3,500,000 which had accumulated and, in addition, to offset a writedown of advertising display assets, patents, and similar items. In April, 1932, stockholders of the Packard Motor Car Company approved the transfer of $10,000,000 from capital stock to surplus. At the end of 1931, the balance in the Surplus account was $5,250,000. The operating deficit for 1932 was $6,800,000. Had the transfer to surplus not been made, the company would have ended the year 1932 with a deficit on its balance sheet.

Many examples might be cited to illustrate the reduction of capital stock to create capital surplus for the purpose of absorbing a writedown of assets. In 1935 the stockholders of Borden Company approved the reduction of the par value of the common stock from $25 to $15 per share. The Surplus account was thereby increased $44,000,000. This permitted the company to write off $23,800,000 in obsolete plant and equipment and to write intangible assets down to $1. In the same year the stated value of the stock of American Smelting and Refining Company was reduced from $33.33 to $10 per share to allow a writedown of $43,000,000 in intangibles. When the book value of plant and equipment is thus reduced, the annual depreciation charges will generally be smaller thereafter. The income statement gains, as it were, at the expense of the balance sheet.

The transfer from capital stock to surplus may also be used to set up needed reserves or to pave the way for dividend payments from current earnings, which a previously accumulated deficit in the Surplus account would prevent. Thus in May, 1938, the stated value of the no-par stock of Chicago and Southern Air Lines, Inc.,

was reduced from $106,091 to $15,015 (15¢ a share) to eliminate the operating deficit. The current earnings were then available for the payment of dividends on the company's preferred stock.

A change in the par value or a change from par to no par value requires an amendment of the charter and must be approved by the owners of a certain percentage of the stock, depending on the law of the state of incorporation and the individual charter provisions. Under the laws of most states a change in the stated value of no-par stock can be made by the directors unless the charter provides otherwise.

2. Stock split-ups and reverse splits. When stock is split up, the dollar amount of capital stock remains unchanged, but each shareholder has a greater number of shares than before. The customary purpose of thus increasing the number of shares is to lower the unit market value and so presumably encourage wider distribution. During the rising markets of the late 1920's, many corporations divided their shares in this manner; a few retraced this step after the following stock market collapse.

An example of this procedure is found in General Motors Corporation's record. In 1920 this company split its common stock 10 for 1 and changed it from $100 par to no par value. In 1924, when the shares were selling at a few dollars each, a reverse split was carried out through the exchange of 1 new share for each 4 held. But in 1927 the stock was split 2 for 1, and in 1929 it was split 21 for 1, in order to reduce the market value per share.

When sufficient surplus is available, the same general result can be obtained from a stock dividend as from a stock split-up (p. 542). Since the declaration of a "dividend" is one of the powers of the board of directors, no formal action on the part of the stockholders would be required. In the case of the split-up, however, stockholder approval is ordinarily required to amend the corporate charter, authorizing the new stock and changing its par value.

3. Recapitalization in anticipation of sale of securities by stockholders or of a merger or consolidation. If the major stockholders wish to dispose of their holdings, they might find it advantageous to exchange their common stock for a combination of preferred and common, or even bonds and common, so as to be able to offer a limited-return, nonvoting security to the public. The latter type of issue might even be the only type of security of the particular corporation that would be salable. Or investment bankers might acquire the whole corporation and recapitalize to have the most salable and valuable combination of securities to offer the public.

A recasting of the capital structure might also be desired when those owning a corporation want to give a special form of security to some person or group. In 1911, when the present Dennison

Manufacturing Company was incorporated, the owners of the stock of the old company were given prior preferred stock for their investment, and industrial partnership stock was issued to administrative heads and major employees. In 1927 these two types of stock were changed to the present 8 per cent debenture stock and management stock, and the present employee stock was created.

Before a fusion is consummated, it may be advantageous to recapitalize one or more of the participating corporations. Bonds may be created, given to the particular corporation, and then assumed by the company that acquires the assets. Or the creation of a different amount or form of stock might make it easier to compare the treatment of the several participating corporations. If the combination were effected by means of a holding company, the operating company in question might create and issue prior securities, which could be retained by the owners, who would thereby retain a senior interest after disposing of their common stock to the holding company.

4. *Adjustment of the preferred stockholders' position: eliminating dividend accumulation.* Although preferred stock does not burden a corporation with maturing principal or fixed interest charges, its presence in the capital structure may prove about as embarrassing to the common stock as would that of funded debt.

As long as an accumulation of preferred dividends remains unpaid, neither the common nor the preferred stock are available for financing. No legal bar would exist, but their price would be depressed, and the market would presumably be unable to absorb any substantial amount of stock. The credit of such a corporation is also affected adversely. The special voting rights of the preferred and restrictions which continue while the preferred dividends go unpaid may be a handicap either to normal operation or to the position of management.

The problem is to get rid of the preferred accumulation as speedily as possible, unless management feels that reviving earning power will enable the company to pay in cash without straining finances. When market conditions warrant or the preferred dividend burden seems too heavy, steps may be taken to reduce the dividend rate or to effect a partial or complete elimination of the senior stock. Since such readjustments are voluntary, the consent of all of the stock or of the percentage required by the state corporation law and the corporate charter must be obtained in order to achieve any of these changes.[2]

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[2] If the corporation's credit is high enough, a preferred stock with no accumulation may be exchanged by much the same process into a new issue paying a lower rate. Such action is akin to refunding. Thus, in October, 1939, E. I. du Pont de Nemours & Co. offered holders of its 6 per cent cumulative

If the plan for readjustment is to gain the acceptance of the preferred stockholders, they must believe that the thing they are being offered is as valuable or more valuable than their claim to dividends. Since these dividends would not be paid till a future time and are subject to the risk of nonpayment, the consideration offered in liquidation of the accumulation may have less market value than the face amount of the accumulation. Thus, in 1927 the Goodyear Tire & Rubber Co. reached the point where the accumulation on its 7 per cent cumulative preferred stock had been reduced by cash payments to $25. An offer was made of a fourth of a share of $7 first preferred stock to liquidate this amount.[3] While the market value of this quarter share was less than $25, it was an immediate settlement which could be realized upon at once; if it was held, a 7 per cent return was realized on the $25, which the Company could pay only at a later time. Some stockholders failed to take advantage of this offer and in subsequent years collected their back dividends, but in the meantime assenting stockholders not only received a 7 per cent return on their investment in back dividends but also saw the market value of the quarter share advance to over $25.

From the corporation's point of view, the management must decide on this occasion whether it will be healthy to assume an increased annual burden of contingent charges by issuing preferred stock for the accumulation. In the case just cited, management believed such a step was practical because, in the period just preceding, an unusually heavy burden of fixed interest and sinking fund charges had been greatly reduced by retirement and refunding. Had the case been otherwise, an offer of common stock might have been made. Such an offer would resemble a stock dividend, but, since the preferred claim is to cash, it must first be declared acceptable by the preferred stockholders. Presumably acceptance will follow only if the market value of the common offered is greater than the stockholders' estimate of the present (or discounted) value of their claim, for it might be paid in future cash if the offer is rej ected.

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debenture stock 1t shares of $4.50 cumulative preferred stock, thereby planning to reduce the contingent charge by about one sixth. The holder of one share who exchanged would receive $5.06 in dividends instead of the former $6.00. The company retained the right to abandon the plan if less than two thirds of the debenture stock accepted. If declared effective, the company planned to redeem all unexchanged shares at $125. The company's credit would have to warrant a market value for the new stock of $111.11 per share, or the equivalent of $125 call price. Otherwise, informed stockholders would prefer to take the cash.

Actually the offer was to exchange one old share with its $25 accumulation for 14 shares of new $7 first preferred, the latter to be a prior preferred to rank ahead of any unexchanged preferred. This subordination of the old issue constituted an additional inducement to accept the exchange.

On rare occasions, bonds may be offered to liquidate the accumulation. In general, the practice is likely to be unwise, since it involves assuming debt and a fixed charge to care for a contingent claim which the company has had difficulty in meeting. If the company's credit is fully able to justify such a debt obligation, the better course would be to borrow in the open market, pay the dividend in cash, and avoid the bother for the stockholders of handling bonds of fractional denomination.

5. *Eliminating preferred stock and accumulation.* However, the possibility of maintaining even the ordinary preferred dividend may be so doubtful as to suggest the desirability of exchanging the preferred stock itself, as well as the accumulation, into a common stock claim. In such a situation the hope of any return for the common stock is so slight that its market value is generally small The right of the preferred to all of the probable future earnings is so complete that it could be argued that the common has no real equity in future earnings and could be eliminated without any substantial injustice. Hopes are not easily crushed, however, and the consent of the common is ordinarily necessary to make a recapitalization operative. In consequence it is customary to offer some small share in the new all-common capital structure to win their consent. By consenting, the common stockholders win a chance to receive some dividends as soon as the preferred does, and the corporation enjoys a more normal capital structure related to current earning power and available for financing in case refinancing or expansion should appear desirable in later years. An example of this type of readjustment is found in the American Agricultural Chemical Company (Connecticut), which, because of unstable earnings, had utilized all available funds for debt retirement and allowed preferred dividends to accumulate between 1921 and 1934. When the program of debt retirement was completed, the outlook for even regular dividends on the preferred was deemed so uncertain that the wisest course seemed to be to recapitalize on an all-common-stock basis. At the same time the opportunity was seized to merge the company with its parent, American Agricultural Company of Delaware. The preferred of the Connecticut Company, with its accumulation of $78 per share, was offered one share of common stock of the Delaware company, and the common was offered one share for every ten old shares. As a result, the preferred acquired an 89 per cent share of the stock of the surviving company, and the common received the 11 per cent balance. The acceptance of such a plan by the common is likely to be conditioned somewhat by the prospects of dividends in the event of rejection and somewhat by the relative market value of the preferred and common issues. However, an excessive speculative market valua-

tion of a weak common equity should not be the basis for an unfairly large proportion in the new issue.

6. *Reducing preferred dividends and eliminating accumulation.* A form of readjustment that lies between the foregoing drastic elimination and the mild solution that merely "pays off" the accumulation with some security is one that alters the preferred stock itself, reducing the preferred dividend charges and sometimes the amount of preferred, but falls short of reducing it to common stock entirely, although giving compensation in the form of common stock or a conversion feature. This method was followed by the American Zinc, Lead and Smelting Company in 1936. The company offered to exchange new $5 convertible prior preferred stock (cumulative after July 1, 1939) plus six shares of common stock for each old share of $6 preferred and $82.50 accumulated dividends. This step lowered the dividend requirement, wiped out the accumulation, and did away with the cumulative feature for three years. For this wholesale reduction in rights, the preferred acquired only 60 per cent of the common equity, but this fact was counterbalanced by making the new preferred convertible into four shares of common stock.

Recapitalization examples. Of the many recapitalizations during recent years involving more than one type of security, two may be outlined here to illustrate the, procedure and logic of such adjustments. In 1930 and subsequent years Armour and Company (of Illinois) experienced a decline in profits which led to the passing of dividends on its $100 par 7 per cent preferred stock in 1931; its Class A ($25 par) stock had received no dividends since 1926, and its Class B ($25 par) stock had received none since its creation in **1920.** By the spring of **1934** earnings were more favorable, but dividends amounting to $24.50 per share had accumulated on the preferred. The management drafted a plan of recapitalization which provided for the exchange of one share of new $6 prior convertible preferred and two shares of common ($5 par) for each share of old preferred, one share of new common for each share of old Class A stock, and one-half share of new common for each share of old Class B stock.

After a period of negotiation a sufficient percentage of stockholders approved the plan, but some of the old preferred stock was not exchanged, and the accumulated dividends on it prevented the distribution of dividends to the new common stock. In January, **1937,** the holders of the remaining shares of old preferred (6 per cent of the original issue) were paid $31.50 per share in full of arrearages, and shortly afterward a dividend of 15 cents was declared on the new common The preferred stockholders who made the exchange received their current dividend, and in addition pos-

sessed two shares of common stock with a book value of $34.50 per share. The holders of the former Class A and Class B stock now had common stock upon which dividends were subsequently earned and paid. (Earnings on the common were 74 and 62 cents a share in 1936 and 1937, respectively; fiscal years ended about October 31.)

The results of the recapitalization were as follows: (1) The accumulation of preferred dividends was eliminated, save for a small amount of nonassenting preferred stock; (2) the current preferred dividend requirements were reduced; (3) the capitalization was simplified by the substitution of one class of common stock for the two issues of classified stock; (4) capital surplus was created as the result of the reduction in par value of the common stock, enabling a writedown of the asset accounts by $53,300,000 without a balance sheet deficit being created.

A somewhat similar voluntary rearrangement of capital structure was proposed in 1936 by the management of the Goodyear Tire and Rubber Company, and the stockholders were asked to send in their written proxies and assent to the plan. On October 1, 1936, there were dividend arrearages of $11.25 per share on the $7 first preferred stock (the only preferred issue) which would require $8,500,000 if paid off in cash. The management wished to eliminate the dividend arrearages and reduce the current dividend rate in line with the low rates prevailing in the capital market. It proposed to exchange one share of new $5 convertible preferred stock plus one-third share of common for each share of the old $7 preferred stock. Any unexchanged shares of the old preferred stock would thereafter be second preferred. Since earnings justified the payment of some dividends, the holders of the new preferred were to receive $4.50 per share in dividends (the dividends were to be cumulative from February, 1936) and the one-third share of common, or a total cash and market value equal to the amount of dividends which had piled up on the old stock. The fact that the new preferred stock was convertible was expected to counterbalance the reduction in the dividend rate. As for the common stockholders, the plan would eliminate the barrier of accumulated preferred dividends as well as the sinking fund provision in the old preferred, which required the setting aside of 10 per cent of consolidated net earnings annually. The plan would also lower the prior dividend charge.

Like that of Armour and Company, this plan was entirely voluntary, requiring the approval of the owners of at least 75 per cent of the preferred stock and two thirds of the common On March 18, 1937, the company announced that holders of more than 98 per cent of the old preferred had deposited their stock for exchange. On March 25, 1937, a dividend of $14.75 per share was paid on unexchanged shares to eliminate dividend arrearages, and on July 1

these shares were retired at the call price of $110. The common stock in the meantime had gone on a $2.50-dividend basis. As a result, the assenting preferred stockholders, who received $4.50 in dividends plus market value of stock of about $14 at the time of the exchange, realized an advantage over the minority who insisted on their right to the $14.75 back dividends or who failed to take advantage of the exchange through ignorance or inertia.

Recapitalization procedure. Something of recapitalization procedure has been suggested in the preceding material. Typically, a plan is worked out by the management of the corporation. After approval by the board of directors, it is submitted to the stockholders by public notice and by letter. In addition to describing the plan, the notice will set forth the reasons for recapitalization and the advantages which it is hoped will be realized. The stockholder will be asked to attend a stockholders' meeting or send in a proxy stating his assent or dissent, or he may be asked to deposit the securities affected, so that the necessary corporate action may be taken to make the plan effective.

Occasionally some of the security holders may oppose the plan. To make their opposition effective they may form a "protective committee" and solicit proxies. Because of the expense of such solicitation and the general tendency of stockholders to return proxies to management without much critical study, opposition is uncommon If management is primarily interested in the position of the common stock, the readjustment plan may be biased in that direction.

A hypothetical case will show how a preferred stockholder might be thus imposed upon. A holder of one share of 6 per cent preferred with an accumulation of $24 in back dividends is offered one and one-half shares of 4 per cent preferred. In the absence of any other consideration, such as a conversion feature, the stockholder has merely been asked to exchange one stock with a claim to $6 per $100 of par *and a claim for* $24 into a stock with the same annual claim to income and *nothing else.* Any possible increase in par value is without significance or value, although the financially unskillful may not fully realize it. The total call price of the stock may be increased, but the value of that feature is extremely doubtful as long as the old stock does not approach that figure in market value. The argument that lower interest rates in the bond market justify a reduction in the rate paid on the new preferred ignores the fact that the corporation is entitled to ask the lower rate only when it has a high credit standing—a condition unlikely to hold at a time when the company is seeking an adjustment for unpaid dividends.

An example of an adjustment in which this argument was used is

found in the plan of the Seiberling Rubber Company announced in the spring of 1939. The holders of the old 8 per cent cumulative preferred stock, with dividend accumulation of $70 per share (to October 31, 1938), were offered a choice of (a) share for share of new 5 per cent noncumulative Class B preferred, carrying with it the old accumulation, or (b) 1.4375 shares of new 5 per cent Class A preferred for each old share plus the accumulation. Those who accepted the latter arrangement would be getting income of $7.181 per share in place of the $8 dividend on the old preferred plus the accumulation of $70.

If the readjustment is attempted at a time when the condition of the corporation is apparently subnormal, it may be necessary to offer excessive consideration in the form of conversion privileges and common stock to the preferred. At such times, the common stockholders might feel justified in opposing the plan in order to avoid undue and permanent dilution in the value of their shares.

After the plan has been approved in accordance with the law of the state and the provisions of the charter, the new securities will be issued. The issuance may or may not require the exchange of old stock certificates for new. The plan may apply only to those willing to accept it, or it may bind all securities of the class affected. The injury of an inequitable plan is especially clear in the latter situation.

Recapitalization and reorganization compared. The adjustments which have been outlined above under the term *recapitalization* should not be confused with the more drastic process to which the term *reorganization* is applied. The leading distinguishing characteristics of the two types of adjustment may be summarized as follows:

1. Recapitalizations are much less drastic, since actual insolvency has not occurred and is not imminent. The chief problem is to adjust the stock section of the capital structure. Reorganizations, on the other hand, are usually designed to adjust the debt structure to actual or threatened default through a thorough scaling down of the capital structure.
2. Adjustments of the recapitalization type are usually initiated by management, whereas reorganizations are forced by default or threatened default on obligations.
3. Recapitalization plans are acted upon voluntarily, but reorganization plans may be put into effect by legal coercion measures. The degree of pressure that may be exerted will depend upon the strategic position of the given security in the capital structure and the degree of financial weakness in the given corporation. The various ways of coercing objecting groups, particularly groups of

junior claimants, into accepting the plan of reorganization approved by the majority and by the holders of senior securities will be considered later.

4. Recapitalization takes place outside of the courts, while reorganizations are usually, though not always, accomplished while the corporation is in the hands of a receiver or a trustee in bankruptcy.

5. In only exceptional cases of recapitalization are protective committees formed by the various groups involved, while few reorganizations are completed except through the process of bargaining among committees representing the various creditor and owner groups.

6. The recapitalized company carries on under its old name and charter, while in reorganization a new corporation often replaces the failed concern.

The causes of failure and the milder remedies or treatments applied to failed concerns are discussed in the next chapter, and the purposes and procedure of corporate reorganization are treated in Chapter 28.

CHAPTER 27

TREATMENTS FOR FINANCIAL FAILURE: COMPROMISES AND RECEIVERSHIP

Meaning of failure ; degrees of financial difficulty. In spite of the best intentions of their owners and managements, a large number of business concerns, great and small, at some stage in their history are unable to meet their debts. This constitutes failure in the sense in which the term is most often used in financial circles. But such inability to meet maturing obligations does not necessarily lead to complete collapse and liquidation. A number of remedies or treatments may be applied in an effort to prevent or to postpone the actual winding up of a business. In this chapter some of these, such as the simple nonjudicial attempts to preserve the business as a going concern and the judicial process of receivership, will be discussed.

Much confusion surrounds the use of the term *failure.* In the broadest sense, a business enterprise may be considered an economic failure when it has been unable to earn a satisfactory return on the investment made by its owners. In this sense, perhaps only a small percentage of all corporations organized have escaped failure. But many corporations at one time or another not only fail to earn a satisfactory return but also experience real financial embarrassment. They are hard pressed to meet their maturing obligations; but they may avoid actual default by having resort to one or more of several sources of temporary financial aid. They may be able to obtain additional credit and pay off maturing obligations from the proceeds of new loans. They may sell assets which are not absolutely required in the ordinary course of business and so may be disposed of without disrupting operations. They may be able to induce stockholders to supply additional funds, not as an investment, but as the price of staving off absolute failure, or they may sell securities at sacrifice prices.

But, if there are fundamental weaknesses whose effects cannot be indefinitely postponed, and default occurs or is about to take place, the company may be said to have failed, and definite steps must be taken to prevent its collapse. These steps correspond to the degree of financial difficulty which is experienced. The first degree may be called *temporary* or *technical insolvency.* In true insolvency

assets are less than liabilities, but in technical insolvency the assets exceed liabilities but are not liquid enough to meet debts as they fall due. Time is required for operations to produce cash. In the meantime the business may be saved from dissolution through the cooperation of creditors in consenting to an extension or composition of the debts or in taking an active part in management through creditors' committees. If such cooperative efforts fail, the business may be placed in receivership pending a solution. These treatments are discussed in the present chapter.

The second degree of financial difficulty is more serious and requires more drastic treatment. The business may actually be insolvent or may be rapidly approaching insolvency, and its debt burden appears permanently insupportable. Under these conditions the more drastic treatment known as *financial reorganization* is required to preserve the business and prevent complete collapse. Consideration of reorganization is reserved for Chapter 28.

The third and final degree of financial difficulty occurs when the business is irrevocably lost, and no treatment will keep it alive. It is dissolved; its assets are liquidated; and the proceeds are distributed among creditors and, if any surplus remains, among stockholders.[i] Complete or confirmed failure resulting in dissolution forms the subject matter of Chapter 29.

Causes of failure. The causes of failure are rarely of purely financial origin; they may emerge in every phase of the business activity. At this point we are more interested in the financial aspects of rehabilitation and reconstruction than in the factors which cause the financial difficulty. However, since the type of remedy or treatment applied should depend on the diagnosis, it is important to recognize where the main difficulty lies. Regardless of whether the cause of difficulty is financial or nonfinancial in origin, failure is indicated by a financial condition which calls for adjustment, and the problem of cure will rest largely with financial management.

The causes of failure may be divided into two groups—external causes, or those which operate from the outside and over which management has little or no control, and internal causes, or those which operate from the inside and which can be attributed to management. This classification is somewhat arbitrary, for it is difficult to determine managerial responsibility with exactness and to decide just how much ability and foresight management may be

[i] Because of the lack of salvage value and the essential nature of the service rendered, a public service corporation is rarely liquidated. Every effort is made to continue operation as a going concern. Occasionally, with the permission of the commission in charge, parts of the property are abandoned or sold to another corporation.

expected to have. If an extraordinarily wise management were assumed, "acts of God"—that is, accidents due to uncontrollable forces of nature—would be the only cause placed in the "external" group, and even in this case management might be expected to carry insurance or make some other provision for the unexpected and sudden casualty. Another method of classification, also somewhat arbitrary, is on a functional basis—that is, according to the department of the business in which the troublesome weakness arises. A combination of these two approaches results in the following list, which can be discussed only briefly because of the limitations of space.

I. Internal causes:
  A. Financial:
    1. Excessive funded debt.
      (a) Initial.
      (b) Subsequent to promotion.
    2. Excessive floating debt.
    3. Slow collections or bad-debt losses.
    4. Unwise dividend policy.
    5. Inadequate provision for maintenance and depreciation.
  B. Nonfinancial:
    1. Unwise initial promotion.
    2. Weak purchasing policies.
    3. Poor production policies.
    4. Unskillful marketing policies.
    5. Inventory losses.
    6. Fraud.

II. External causes:
    1. Excessive competition.
    2. Changes in public demand.
    3. The business cycle.
    4. Political. •
      (a) Excessive taxation.
      (b) Hostile regulation.
      (c) Adverse tariff legislation.
    5. Foreign and special factors.
    6. Accidents of nature ("acts of God").

Upon inspection of the list of "internal" causes, it is evident that, except for outright fraud, they may all be summed up under the term *unskillful management.* This term might cover the "external" causes as well, were it not for the fact that corporate management cannot be expected to be all-wise and gifted ,with prophetic

powers. Nevertheless, an astute management will make provision as far as possible for changes in the volume of business resulting from competition and changes in demand. It will adjust its financial structure according to the degree to which the concern is vulnerable to such factors as competition and the business cycle, and it will provide some kind of buffer or cushion of protection against sudden events.

Certain of the causes of failure listed above deserve more extensive discussion. Excessive long-term debt may be the result of overissuance of bonds at the time of promotion, or it may result from the gradual decline of net earnings because of a downward trend in the particular industry or in business in general. A top-heavy burden of maturities and fixed charges leaves the concern vulnerable to a relatively small decline in the earnings available for interest. The Missouri Pacific Railway Company is a case in point. Between 1921 and 1930, the company never earned its fixed charges in any calendar year by as much as one and three-quarter times; the ten-year average was 1.4 times. The use of bonds rather than stock in financing during the 1920's can be explained by low earnings, which gave rise to an accumulation of unpaid preferred dividends that made both preferred and common practically unavailable. In 1930, when the decline in railway earnings began to make itself felt, the fixed charges were earned only 1.33 times. The ratio of bonds to stock in the total capitalization was 71 to 29, and surplus was relatively small. Consequently this company, which was created in a reorganization in 1917, was one of the first of the major railroads to fail in the ensuing depression. A thorough reorganization is usually necessary to correct such chronic overindebtedness.

Excessive floating or current debt is perhaps the most frequent superficial cause of failure. "Lack of working capital" is often offered as the reason for defaulting on maturing obligations. But lack of working capital is itself the evidence of more fundamental weakness. It may be due to inadequate investment by owners, deficit operation, overexpansion of current or fixed assets on borrowed funds, excessive dividend payments, poor collections, losses on inventories, or some other factor which may cause the corporation to lack the cash necessary to meet maturing current debt. If the debt cannot be renewed, funded, or extended, the corporation must default, and receivership or one of the other remedies or treatments discussed below must be resorted to as a relief measure.

Payment of excessive dividends may cause such a drain on funds as to leave the corporation hard pressed for cash in an emergency. The factors that determine dividend policy have already been discussed (Chapter 22) ; it suffices to repeat here that payment of all

or almost all net income in the form of cash dividends may be justified in the case of companies with unusually stable earnings or an unusually strong backlog of quick assets, but most companies should retain at least some of their earnings as a cushion or buffer against periods of low returns. Furthermore, if the common equity cannot be built up by a sale of stock, a growing company should retain enough earnings to keep its capital structure well balanced. Excessive dividends are particularly dangerous when they are derived from earnings that are overstated because of inadequate maintenance and depreciation.

Many enterprises, having no real economic justification, are doomed from the beginning. A thorough job of investigation in the promotional stage should eliminate those propositions which have no possible chance of survival. Very speculative enterprises should be conservatively capitalized and financed by investors who are in a position to risk the loss of their entire stake.

One or two other causes of failure may also deserve brief comment. The nonfinancial "outside" causes listed above account perhaps for the majority of casualties. To the extent that excessive competition cannot be avoided through some sort of combination, it may be an inescapable cause of failure, for most business capital' is in relatively immobile assets and cannot be easily shifted to a new employment. Theoretically, of course, the well-managed individual business should be able to meet competition successfully. Actually, the very practices of competition, particularly of the cutthroat variety, may drag down the strong with the weak, as the railroad companies discovered before the days of effective Federal regulation.

The "business cycle" is often cited as a major cause of business failures. The decline in total business activity is shared by most business concerns. Only the strongest survive without some impairment. The individual business is relatively helpless in the face of the downward spiral of prices and volume. However, modest capitalization, small debt, adequate reserves, and proper financial control can do much to tide the well-managed concern over a temporary depression.

Political, or governmental, action may be of the greatest importance. Excessive taxation can be used to destroy. Taxes on holding companies and chain stores have been aimed in this direction. The possibly crippling effort of an undistributed profits tax has been cited (p. 540). Tariffs have been used to foster domestic industry, and some lines of business can only exist through the continuance of this protection. The financial importance of regulation is most clearly seen in the case of the railroads and public utilities. But its significance may be crucial in other fields as the result of such

items as wages and hours regulation and the control of labor relations.

Foreign and special factors may also turn an otherwise prosperous business into a failure. The passage of restrictive tariffs and quotas may kill the export market upon which the trade depends. New inventions by competitors, the expiration of patents, the sudden drying up of sources of supply of materials, and other influences may spell the doom of a concern, and their frequently unpredictable nature makes it hard for the management to provide for them in advance. Hazards of the "act of God" type are particularly dangerous in this respect, although the farsighted management may be able to make some provision against these contingencies through insurance and reserves.

Whatever the cause of failure may be, every effort will be made to preserve the company as a going concern, in order to prevent the almost inevitable sacrifice of values which a forced sale involves. For this reason owners and creditors will generally cooperate in an effort to forestall dissolution and liquidation. The remedies or treatments applied must of course vary from case to case, depending on the causes and the degree of financial difficulty. They may be grouped into four classifications for the following discussion: (1) simple nonjudicial remedies, including extensions, compositions, and creditor's committee management; (2) receivership in equity; (3) nonjudicial reorganizations; and (4) reorganizations in equity and bankruptcy. Discussion of the last two is reserved for Chapter 28. Should one or more of these remedies be tried and fail, liquidation and dissolution along the lines discussed in Chapter 29 is the last resort.

As a general rule, creditors are more willing to cooperate if the causes of financial difficulty are external, indicating no basic fault of management or operating methods, and if the difficulty is regarded as temporary. But when management has been at fault or when the difficulty is deep-seated, drastic measures are more logical. Such changes in management and methods as are necessary should be made, or the liabilities should be reduced to the amount which the business can support.

Nonjudicial Treatments

Extensions. In general, it is to the interest of the creditors, as well as of the debtor corporation, to avoid legal proceedings, with their attendant expenses, unfavorable publicity, and shrinkage in asset values. If the business is small, the creditors few, the management reliable, and the difficulties temporary, a friendly adjustment may be made with the creditors whereby they agree to an extension of the maturity of the debt which is causing the difficulty,

rather than force a settlement at once. This step requires that the creditors cooperate fully in affording the relief, for no creditor can be forced to sign any agreement, and the agreement is binding only on those who sign.[2] For this reason small creditors are sometimes paid in full to prevent nonassenters from starting bankruptcy proceedings.

This friendly type of adjustment is limited almost entirely to small businesses with few creditors. It suggests the advantages of concentrating purchases and trade indebtedness and using bank credit to pay off all save a few major trade creditors. As a method of dealing with the large corporation in trouble over bond interest or bond maturities, the extension obviously has distinct limitations because of the number of creditors involved and their impersonal relationship with the corporation. However, recent legislation (Chapter XV of the Bankruptcy Act, approved July 28, 1939) has provided for voluntary extension or modification of railroad obligations under court supervision. If the Interstate Commerce Commission is satisfied that the corporation's difficulty is only temporary and that it is not in need of real financial reorganization, and after creditors holding more than two thirds of the total claims affected, including a majority of each class affected, have assented to the plan of modification, the court may put it into effect.[3]

Compositions. Adjustments such as an extension of time in which to meet obligations may be all that is necessary to provide the solvent but financially embarrassed concern the required relief. But, if the business is insolvent, or if its assets, though greater than liabilities, are made up largely of fixed properties which are not easily convertible into cash, it may be desirable for creditors to go further and agree to a settlement of the debts. An arrangement known as a *common-law composition* may be worked out, whereby the creditors sign an agreement to accept a certain percentage of their claims as full and final payment. Upon payment of this amount, the debtor's obligations are discharged. The composition settlement is usually proposed by the debtor, who submits a proposal to his creditors offering to pay a certain percentage of their claims. A portion of the settlement may be in cash, but the

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[2] Recent amendments to the Bankruptcy Act provide for extension arrangements in unincorporated concerns by formal legal process, whereby minority unsecured creditors are bound by the plan acceptable to the majority. See pp. 717-718.

[3] Railroads which immediately filed for debt adjustment under this legislation included the Baltimore and Ohio Railroad Company and the Lehigh Valley Railroad Company.

This type of adjustment should not be confused with the more drastic process of reorganization in bankruptcy provided for railroads by Section 77, an earlier amendment to the Bankruptcy Act. See pp. 675-676.

major consideration is likely to be in notes of extended maturity subject to gradual repayment.

Like the other friendly adjustments described here, the composition is feasible only when all the creditors agree, for dissenting creditors may force the company into bankruptcy.[4] There is even the hazard of committing an act of bankruptcy (see p. 618) in working out a composition; this danger is not present in a simple extension of debt maturity. For these reasons, this type of adjustment is practically restricted to the smaller concerns whose debt is represented mainly by bank and trade payables. Like the other types of friendly adjustment, composition avoids the delays and waste which bankruptcy usually involves and permits the debtor to rehabilitate his business. The creditors may prefer to take 50 cents on the dollar and help maintain their customer as a going concern rather than force him to liquidate and pay off at 20 cents. The remembrance of past profitable business and the hope of its continuance if the concern survives will also make trade creditors cooperative. Wholesale houses and jobbers recognize that, in an era of chain stores and mail order houses, they must keep their customer outlets in existence to preserve their own position.

Creditors' committee management. If the creditors are agreed that bankruptcy or even receivership should be avoided but are unwilling to allow the existing management to retain direction of the company's affairs, a committee representing the creditors may be formed to manage the business. An agreement is entered into between the management and the creditors, whereby control is passed over to a committee or a representative of the creditors, who agree to an extension of claims and even to the advancement of fresh capital. Such agreements are most likely when the liabilities are short term, representing trade and bank debt, and the business is regarded as fundamentally sound but embarrassed by some unusual condition, so that delay or compromise on debts is likely to result in a larger ultimate recovery and the restoration of the business to normal operation.

The creditors' committee management device was widely used during the period 1920-1922, when inventory values shrank sharply and bank creditors in particular chose to direct the affairs of the companies rather than force them into the hands of receivers. Dewing points out:

> . . . it is no exaggeration to say that three quarters of the embarrassments of industrial enterprises, following the reaction of 1920, involving more than a hundred thousand dollars of liabilities, were handled by com-

[4] Compositions *in bankruptcy* are now provided for unsecured creditors of unincorporated concerns in the recent amendments to the Bankruptcy Act. See pp. 717-718.

mittees of creditors rather than by court-appointed receivers. The method was also applied to public utilities.[5]

Creditors' committees were supposed to be superior to receivership in three respects: (1) the presumption of greater administrative skill of bankers than of outside receivers; (2) the greater chances of cooperation among creditors; and (3) less unfavorable publicity. Dewing goes on to say, however, that the actual results of creditors' committee management were less satisfactory than had been anticipated. The committees for the most part did not correct the fundamental weaknesses of the businesses they undertook to manage. They lacked the power of court receivers to deal with recalcitrant creditors. And they laid themselves open to criticism and possible damage suits whether they succeeded in rehabilitating the business or not.[6] After the next depression set in, from 1930 on, the creditors' committee type of rehabilitation was not prominent. Two reasons for its failure to achieve the prominence it had attained ten years previously were (1) the recognition of its disadvantages; and (2) the possibility of more speedy reorganization under the amendments to the Bankruptcy Act that were passed in 1934.

Receivership

Meaning of receivership in equity. When voluntary friendly adjustment with creditors or creditors' committee management are impracticable because of the number and distribution of creditors and their diverse claims, the next alternative is receivership in equity. The appointment of a receiver by a court of equity is usually the result of the wish of the owners or creditors to preserve and protect the property and to prevent forced sale and liquidation. Originally a device for administering estates, receivership today is used chiefly by corporations which are in financial trouble. Since 1870 there have been over 1,000 railroad receiverships alone.?

A. S. Dewing, *Financial Policy of Corporations* (New York: Ronald Press Co., 3rd rev. ed., 1934), p. 1262, footnote ee.

Ibid., pp. 1266-1270.

That creditors must feel some responsibility in conducting the affairs of their debtors was brought out early in 1938, when damages of $569,000 were awarded a big Chicago brewing concern, Prima Company, against the First National Bank and the Harris Trust & Savings Bank These creditor banks had placed a representative in charge of the brewery, but the sales declined steadily, and the company sued and won on the grounds that the banks were responsible for the losses. The Circuit Court of Appeals reversed the decision in September, 1938, ruling that the banks were not responsible for the losses during the regime of their representative. During his stay the officials had actually been enthusiastic about his policies. The case will nevertheless cause creditors to hesitate before actively entering into management.

A. A. Berle, Jr., "Receivership," *Encyclopaedia of the Social Sciences,* Vol. 13, p. 149.

Receivership in equity, therefore, constitutes a very important treatment or remedy for financial difficulty. It should be clearly distinguished from *receivership in bankruptcy.* A receiver in bankruptcy, as we shall see in Chapter 29, is a court agent whose function is to take over the property of the bankrupt temporarily until a trustee is appointed. Receivership in bankruptcy usually has to do with *liquidation.* Receivership in equity has to do with preservation of the property and earnings of the failed corporation, pending rehabilitation or reorganization, except in those cases where the court orders liquidation after attempts at rehabilitation have failed. The term *operating receivership* would apply in the majority of cases.

Receivership should also be clearly distinguished from *reorganization.* As we shall see, the reorganization of the financial structure of a corporation may be accomplished by voluntary action of the owners and creditors. The main purpose of reorganization is to remedy the excessive debt and fixed charges which have resulted in default. However, since the process of reorganization usually takes considerable time, especially when there are large amounts and different classes of securities outstanding, the company is usually placed in the hands of a receiver until a plan of reorganization has been worked out and put into effect. Since 1933, in reorganizations under the Bankruptcy Act, the trustee in bankruptcy has replaced the receiver in equity. As we shall see in the following chapter, the trustee performs much the same functions as the receiver and, in addition, has more jurisdiction over the plan of reorganization. Although the receiver usually has no part in the reconstruction of the financial structure, reorganizations of corporations in the hands of a receiver in equity and under the jurisdiction of a court of equity are called *equity reorganizations.* Reorganizations of corporations which have been adjudged bankrupt and which are in the hands of trustees are called *reorganizations in bankruptcy.*

In rare cases, the receiver is so successful in rehabilitating the affairs of the company that no financial reorganization is necessary, and the properties can be returned to the control of the former management. In other cases, especially if the concern is small, efforts to reorganize it during receivership may fail, and the receiver may be ordered to liquidate the property. In the majority of cases of medium-sized and large corporations, however, the company is reorganized, a new corporation is formed, and the receiver turns over the properties to the management of the new corporation. The excess of the value of the assets to a going concern over what they would be worth in liquidation is thus preserved.

Circumstances leading to receivership. The usual circumstances leading to the appointment of an equity receiver are default or impending default of an obligation, or the foreclosure of a mortgage. If the creditors will not agree on a voluntary adjustment or extension of their claims or to the appointment of a creditors' representative or committee, receivership is about the only alternative to bankruptcy. Under the law, any creditor unable to collect his debt at maturity may start a suit and, after procuring judgment, can levy an execution to have property of his debtors seized and sold to satisfy the judgment. A receiver affords protection to those who do not desire liquidation from those who do or who insist upon immediate payment. If reorganization is required, the property of the corporation must be placed under court protection to effect a kind of legal moratorium of debt claims lest their execution dissipate the assets during the working out of a satisfactory plan. Receivership is particularly necessary when different creditors or creditor groups have liens on different parts of the property, to prevent the disruption of the property and of the organization and goodwill of the corporation. Companies with a variety of properties and heavy fixed assets, such as railroads, must be operated in order to have value, in contrast to those with large current assets, which might have a ready market. While the receiver holds the property, it is protected against individual seizures.

Theoretically, the courts are reluctant to appoint operating receivers, on the grounds that a receiver should supplant the management only when extraordinary action is necessary to protect all parties concerned. Actually, applications for "consent" or "friendly" receivers, recognized as acceptable to, if not actually sought by, management, are granted almost as a matter of course. During receivership the business goes on under the management of the receiver. A breathing spell is provided, during which the decision is made to rehabilitate the business and turn it back to its owners, to reorganize and turn it over to a new corporation, or to liquidate.

Appointment of receiver; consent receiverships. The receiver is appointed by a court of equity. He is an agent of the court and is empowered to manage the property under the direction of the court. The court has complete control over the appointment, which no owner or creditor can demand as a matter of right. The court must be satisfied that the receivership is necessary to conserve the property and provide for an orderly adjustment of different interests; otherwise individual creditors might throw the corporation into receivership to the disadvantage of others, because of either business rivalry or personal animosity.

The operating receivership in equity may be of either state or Federal origin, but in large enterprises the appointment is usually made by the Federal court. Ancillary receiverships are necessary when the property is located in more than one district. Thus, in the receivership proceedings of the Middle West Utilities Company in 1932, ancillary receivers were appointed in some 20 Federal court districts in 16 different states.

The initiative is customarily taken by the management, partly because the step is necessary to the preservation of the business and partly because their prior action is likely to prevent hostile parties from seizing control. The management makes arrangements with some friendly unsecured creditor whose claim exceeds $3,000 and who is not a resident of the state in which the company is incorporated to ask a Federal district court for a receiver. A Federal court is preferred in order to prevent conflicts that might arise if the appointees of two or more state courts should prove uncooperative. The creditor files a complaint stating that the corporation is unable to meet its debts and that, if a receiver is not appointed, the creditors will seize its property and prevent the business from continuing as a going concern, with resultant losses to all. The corporation's answer, prepared and filed at the same time, admits the allegations and likewise prays for the appointment of a receiver. After the hearings, the court, if it does not suspect fraud, will ordinarily appoint a permanent receiver, sometimes a member of the old management, and, in order to have a disinterested party, a coreceiver, who is likely to be a lawyer in whom the court has confidence. Only when all parties consented would a court appoint as receiver a party identified with either side of the case, even as counsel. Lawyer receivers are common because of the numerous legal problems; the receiver can retain the services of such operating officials as he wishes.

The "consent" or "friendly" receivership has several advantages. The business enjoys a period of relief, during which, under the same management, it can work out of its difficulties or prepare for a plan of reorganization satisfactory to all groups of claimants. The consent receivers, being friendly to the company, may administer the assets more economically and have the receivership last for a shorter period of time than pure outsiders, "friends of the court," whose main interest may be to make the receivership last as long as possible, with attendant waste and expense.

On the other hand, complaints have been made against the consent receivership on the grounds that it is a subterfuge, a method by which the corporation may obtain an indefinite moratorium against creditors' claims. The consent receivership is also open to the objection that it enables the old management to remain in

charge of the properties to the detriment of investors, since it may maintain inflated salary and expense accounts and continue the same inefficiencies that brought the business to its present parlous state. While such charges are doubtless justified in some cases, it should be recognized that the management of specialized and complicated business operations should be conducted by individuals who are thoroughly familiar with the peculiar problems of the business. The problem is to obtain a receiver who is not only disinterested but competent.

The consent receivership had its origin in the early railroad reorganizations, because railway companies could not be brought under the bankruptcy laws, and the procedure was later adopted by utility and industrial corporations.[8] The passage of the amendments to the Bankruptcy Act in 1933 and 1934 permitting corporations (including railroads) to reorganize in bankruptcy has considerably diminished the importance of the consent receivership. Now the more frequent procedure for a corporation of any size is to petition for a bankruptcy decree and to be placed in the hands of a trustee in bankruptcy.

Powers and functions of the receiver. Upon his appointment the receiver (or receivers) assumes possession of the property of the company under a court order which stipulates his powers as custodian of the property, sometimes in a specific and sometimes in a very broad fashion. The subsequent actions of the receiver are subject to court review and approval. His powers may be enlarged on his application or on the court's own motion. His usual powers and functions may be outlined as follows:

1. *To manage and continue the operation of the company.* In the case of railway and public utility companies, the receiver is always empowered to continue the operation of the business. This power is also given in all consent receiverships, in which the idea is to rehabilitate rather than liquidate the company.

The following quotation from an order appointing receivers for the Standard Parts Company in 1920 illustrates this intention:[9]

> Said receivers are hereby authorized and directed to take immediate possession of all and singular the property above described wherever situated or found and to continue the operation of said company.

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[8] "The consent receivership, which was regarded as revolutionary when first employed but now hardly excites comment, has been traced back to the Wabash receivership which arose in 1884. The consent receivership was finally directly sustained by the Supreme Court in 1908, when it passed upon the validity of the equity receivership of the New York City Transit Lines (*Re* Metropolitan Railway Receivership, 208 U. S. 90)." *Ibid.,* p. 150.

[9] Certified copy of Order appointing Receivers, Erie Malleable Iron Co. v. The Standard Parts Co., in the District Court of the U. S., Northern District of Ohio, Eastern Division, September 1, 1920.

All officers, directors, agents and employees of the Standard Parts Company are hereby required and directed to forthwith turn over and deliver to such receivers, or to their duly constituted representatives, all property in their hands or under their control.

Said receivers are hereby fully authorized to conduct the business and operate the same and manage its properties and to do all things necessary in order to preserve said property and continue the business of said corporation.

In the case of many industrial nonconsent receiverships, however, the receiver's chief function is, on the order of the court, to liquidate or sell the business at the best price obtainable and distribute the assets to the creditors, on the theory that continued operation at a loss may only further deplete the assets. Even in these cases, however, temporary operation may be desirable in order to give the business time to complete unfinished contracts or to allow it to be sold as a going concern.

As manager of the business, the receiver collects the income from the property and applies it, under the direction of the court, to the payment of operating expenses; occasionally, when earnings permit, he may pay such fixed charges as are entitled to payment because of their security. He collects all debts due the company and defends it against all suits. He may choose to retain the existing personnel and make few important changes in general policy, or he may prefer to revamp the personnel and make radical changes in general policy. In the performance of his duties, he may employ necessary counsel and experts, and his general expenses are regarded by the courts as prior claims on the income and assets of the company. This priority enables him to obtain the labor and materials with which to operate.

2. *To control claims against the company.* Subject to court order, upon review of the company's obligations, the receiver may postpone payments to certain creditors and pay others, except that he must give due observance to legal priorities. His current expenses are a prior charge against income and are met before income is devoted to the payment of old debts or of fixed charges. Interest on bonds may be paid to the extent it is earned, or the receiver may prefer to use the income to make up neglected maintenance and to rehabilitate the properties. In effect, the legal rights of creditors, while not materially changed, are suspended for a period at the discretion of the court in order that their ultimate collections may be increased.

3. *To control leases and contracts.* With the consent of the court, the receiver has unusual powers over leases and contracts entered into prior to the receivership. One of his first and most important duties is to review the contracts and decide whether to abide by them or reject them. If he rejects a contract or lease,

the injured party is usually permitted to come in as a creditor of the corporation to the extent that he can prove damages resulting from the breach."

4. *To raise new money for the business.* The most common superficial cause of failure is lack of working capital. Consequently the receiver usually requires new money to liquidate pressing obligations, rehabilitate the property, and even purchase some new equipment if his operating powers are broad. He has three sources of new money: first, the net income, if any, of the company after operating expenses; second, the money "saved" by declining to pay some interest and rentals (the claim for unpaid interest and rent is usually recognized in the subsequent reorganization) ; and, third, the creation of new debt, including the issuance of receivers' certificates.

Receivers' certificates are obligations of the receivers in their official capacity but not as individuals." They are usually short-term, callable obligations and command a relatively satisfactory investment rating and a low yield (at least as compared with the company's commercial credit)—an apparently paradoxical situation until it is realized that the certificates, if properly authorized by the court, usually take precedence over the obligations incurred prior to receivership. The priority of the certificates arises from the fact that, since the court now has the custody of the property, and new money is necessary to preserve the property, the obligations of the, receiver with respect to that property as a whole outrank the individual obligations. When the certificates are issued for a proper purpose, the court may give them a priority over even the first mortgage bonds of the company.[12] The general rule is that they will be given preference over all defaulted obligations but will be junior to undefaulted debt.

The receivers' certificates, like the obligations of the company

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" W. J. Grange, *Corporation Law for Officers and Directors* (New York: Ronald Press Co., 1935), p. 617. Landlords' claims in *bankruptcy* are subject to special rules. See p. 683.

" See pp. 168-169 for a more extended discussion of receivers' certificates.

11 The common opinion that receivers' certificates always take precedence over all previously outstanding obligations is not true. They have to be duly authorized and specifically given priority. The court may order their priority in any way it deems necessary for the protection of all interests concerned. Generally they have a claim just prior to that of the secured creditors of the company. Cook points out that "in some instances receiver's certificates and receiver's debts have consumed the entire property, leaving nothing whatsoever for the mortgage bondholders—a natural result of courts engaging in the carrying on of business enterprises. There is a limit, however, beyond which the courts will not go. The issue of receiver's certificates, prior in right to a mortgage, will not be ordered unless the trustee of the mortgage is a party to the suit and has notice of the application." W. W. Cook *Principles of Corporation Law* (Ann Arbor: Lawyers Club, University of Michigan, 1925), pp. 608-609.

proper, must, of course, be satisfied out of the property of the corporation. If the corporation is ultimately reorganized, the certificates are usually paid off out of the proceeds of the sale of new securities or of assessments on stockholders. If they are not paid off in cash, they are given prior lien bonds of the reorganized company. Probably in only a few cases have the holders of receivers' certificates been forced to make any considerable sacrifices.

5. *To conduct a thorough examination and audit and to prepare a report on the condition and needs of the business.* While the receiver seldom has any direct voice in the reorganization which may end the period of receivership, his reports are usually valuable to those who plan the actual reorganization of the capital structure.

6. *To report to the court having jurisdiction.* The receiver must report sufficiently often and in enough detail for the court to determine whether continuation of the business is practicable or whether the receiver should be dismissed.

The outcome of receivership. The receiver retains custody of the property until one of three events transpires:

1. The company is rehabilitated during the receivership, and the property can be turned back to the owners in such a condition that it is able to meet its obligations. Since receivership is usually the result of serious financial difficulty, this eventuality is rare. There are, however, cases on record in which the receivership, as a single remedy, has worked. [13]

2. The most frequent outcome of receivership is for the corporation to be reorganized with a new capital structure. In order to bring this step about, it is customary to form a new corporation as a means of compelling the exchange of the old securities for the new.

3. When neither rehabilitation nor reorganization is possible, industrial corporations may be liquidated, and the properties of public service corporations may be sold to other companies. [14]

"For example, in 1935 the receivers of the Lionel Corporation, toy manufacturers, filed a petition in the Federal Court in Newark, N. J., for the discharge of the corporation from receivership. Receiver's checks for about $300,000 had been distributed to 469 creditors, paying in full all current debt owed by the corporation at the time it went into receivership in May, 1934, when the company had liquid assets of only $62,000 and current liabilities of $296,000. The preliminary statement of the company for January 1, 1935, showed quick assets of over $500,000 after payment of receiver's certificates, general creditors' claims, and $600,000 bond and mortgage obligations. In this case, it is likely that business recovery and the increased sale of toys was responsible for the change in the situation. At any rate, bankruptcy had been avoided, and the corporation has continued as a prosperous concern. *The Annalist,* January 11, 1935, p. 41.

" Occasional cases are found in which the receiver remains in charge of the properties for a long period. Thus the Pittsburgh, Shawmut and Northern

Advantages and disadvantages of equity receiverships. Compared to voluntary nonjudicial attempts to remedy the financial difficulties of corporations, such as the use of the creditors' committee management device, receivership has certain advantages, as follows: (1) The receiver, because of his extraordinary powers over contracts and debts, has a stronger hand in dealing with recalcitrant minorities who will not "play ball" with the management and the agreeable majority of creditors; (2) the claims of the creditors are properly validated; and (3) the receivership may permit the raising of some new funds through the use of receiver's certificates.

On the other hand, receivership draws public attention to the financial difficulties of the company. It is a proclamation to the world of inability to pay debts, and irreparable damage may be done to the credit and goodwill of the business. In addition, receivership may be the most expensive method of rehabilitation. The precedence given to the receiver's (and his attorney's and experts') expenses opens the door to wasteful and reckless operation of the business, especially in the smaller companies, for which such expenses bulk large in comparison with revenues and resources. Ancillary receiverships add greatly to the total costs. Railroad receiverships have been particularly costly, owing to the relatively long period required for reorganization. The 222 receiverships between 1894 and 1931 of roads operating more than 100 miles of line approximated an average duration of 32 years, and those of roads operating more than 1,000 miles had a duration averaging over 4 years.[15] Since the recent amendments to the Federal Bankruptcy Act (discussed in the next chapter), failing railroad and other corporations have sought relief through reorganization in bankruptcy, and the appointment of receivers has been supplanted by that of trustees in bankruptcy.

Railroad Company has been in receivership since 1905, and the Minneapolis and St. Louis Railroad Company has been in receivership since 1923.

[15] Berle, *op. cit.,* p. 152.

CHAPTER 28

REORGANIZATION OF CORPORATIONS

Meaning and Purposes

Meaning of reorganization. In the financial sense, reorganization is a process involving a recapitalization which the corporation is compelled to undergo either because insolvency has been evidenced by a default on an obligation or because such default is imminent. The process is ordinarily carried out during receivership or bankruptcy, in which case it is called *judicial reorganization,* although it may be carried out by negotiation between security holders and management. It may result in the formation of a new corporation. Thus reorganization belongs at the end of the group of remedies or treatments for financial failure, in the sense that it can be likened to a major operation, simpler remedies having been discarded or having failed. Like the simpler remedies considered in the preceding chapter, it is designed to prevent the disintegration of the business and to conserve its property as a going concern. For railroad and public utility corporations it is the last resort, for in all but extreme cases the law insists that these corporations avoid liquidation, partly because their fixed assets have little value except as a going concern, but particularly because their public service nature requires that they be operated in the public interest as long as possible.

Although a reorganization of the capital structure may be achieved by negotiation and the mutual consent of the interested parties, it is generally necessary, especially when large corporations are involved, to use the judicial processes set up by law. While the situation is being studied and a plan of reorganization is being evolved, the corporation can be administered under the protection of the court through a receiver in equity or a trustee in bankruptcy. Occasionally the trouble is cured during this period of court control, and the corporation is discharged without reorganization. The extension of the sheltering wing of the court freezes the position of the various classes of creditors against the raids of impatient creditors, which might otherwise halt operations and destroy investment values.

Purposes of reorganization. While reorganizations vary greatly with the circumstances of the individual corporation, the more common objectives are as follows:

1. To find and, if possible, to eliminate the operating and managerial causes of the difficulty.
2. To reduce fixed charges.
3. To reduce or eliminate floating debt.
4. To simplify the capital structure.
5. To raise new funds for working capital or property rehabilitation.

If the difficulty is not fundamental, but is one which can be corrected during the period of receivership or trusteeship by a change in management or operating policies, the ensuing reorganization will be mild. If the management appears ordinarily competent, there will be every reason for its retention in order to minimize the disturbance to personnel. The amended (1938) Bankruptcy Act contains a new provision requiring that the manner of selecting the management of a corporation reorganized under it shall be in the interests of investors and consistent with public policy, and that the judge, in confirming the reorganization plan, must be satisfied that the appointment of a new management or the continuation of the existing management shall be in the investors' interests and consistent with public policy.

The reduction of fixed charges is the primary purpose of railway and utility reorganizations. As we have seen, these groups of companies are characterized by a large percentage of funded debt to total capitalization. When the earnings available for interest decline, the heavy fixed charges loom up as an obstacle to solvency. The reorganization plans of rail and utility companies invariably include provisions for the reduction of the fixed interest burden through reduction in the rates of interest or the amount of funded debt or through a change to securities that have no fixed claim to income.

Industrial corporations do not use bonds as a means of raising funds to the same degree; the reduction of fixed charges is therefore not as frequent a purpose of industrial reorganizations. More often the trouble is caused by unwieldy current debt, which may be converted into long-term debt, with the result that the industrial corporation may emerge from reorganization with larger fixed charges than it had before. Current indebtedness to trade and bank creditors is more typical than funded debt, particularly for lesser concerns. So much depends upon their willingness to continue credit extension to the concern that their position is of the greatest strategic importance in reorganization.

Most reorganization plans include some provisions for improving the working capital position of the failed company. Later in the chapter we shall note the sources of and uses for the new money raised by means of reorganization.

The opportunity to simplify the capitalization is usually seized during reorganizations, especially in those of railroad corporations, in which the capitalization is likely to consist of a considerable number of bond and stock issues. Elimination of numerous issues by consolidation into one new bond issue or exchange for stock is a common result of the reorganization process. In industrials, as we have just noted, the number of security issues of different types is sometimes increased rather than decreased.

Further illustration of these motives or purposes of corporate reorganization will be found in the following discussion of the reorganization process.

Types of reorganizations. Certain differences among reorganizations may be noted. Rail reorganizations are noted for the length and complexity of the process, for their emphasis on reduction of fixed charges and simplification of the financial structure, and for their lack of emphasis on floating debt. They are also affected by the factor of jurisdiction exercised by the Interstate Commerce Commission. Utility reorganizations resemble those of railways in their emphasis on funded debt adjustment. However, utilities usually have simpler capital structures, and their reorganizations require the approval of state utility commissions. Industrial reorganizations usually have been more drastic, for these companies can be liquidated. In them, current debt plays a prominent role. The process is not usually so complex, because of the greater simplicity of industrial capital structures. The reorganization of financial corporations is primarily a task of estimating and preserving the values and liquidity of the assets. That of real estate companies involves mainly the revaluation of the assets and the shrinkage of fixed charges.

As pointed out in the preceding chapter, simple reorganizations may be worked on a voluntary basis if the parties involved are few and willing to cooperate. As the situation becomes more involved, it is generally necessary to operate the business under the protection of a court, either through a receiver or a trustee. As a result of simplification and the greater powers of forcing compromises under the amended Federal Bankruptcy Act, the equity receivership is likely to be less frequently used than trusteeship in bankruptcy. The Chandler amendments in 1938 left Sec. 77 as the law applicable to railroads, but former Sec. 77B was succeeded by Chapters X and XI. Chapter X covers the reorganization of major

corporations; Chapter XI governs smaller concerns, whose reorganization is primarily a matter of adjusting unsecured debt.

Procedure of Reorganization

Preliminaries to reorganization. In the majority of cases, reorganization, whether private or judicial, is the result of inability to meet maturing obligations. Occasionally the opportunity to reorganize will be seized by the management prior to failure; but, until creditors have had a demonstration of inability to pay, it is difficult to force them to take sacrifices. As we shall see, reorganizations are sometimes attempted outside the jurisdiction of the court, through private and voluntary negotiations. But, prior to the passage of the amendments to the Bankruptcy Act, the event heralding the reorganization proceedings was almost always either the appointment of a consent receiver (one friendly to the management) or the filing of a bill to foreclose a mortgage on the corporation's property by the corporate trustee after default. If a receiver is appointed, the mortgage trustee then intervenes in the receivership proceedings and obtains permission from the court to file an ancillary bill to foreclose the mortgage. If the corporation to be reorganized has no mortgage creditors and does not default on a secured debt, the appointment of receivers on the petition of unsecured creditors is the usual incident leading to the reorganization.

Under the amended Bankruptcy Act, corporations may be reorganized "in bankruptcy," although the corporation is referred to as the "debtor" rather than as a "bankrupt." In the case of railroad corporations, a reorganization proceeding may be initiated by the filing of a petition in the appropriate Federal district court for relief under this act, either by the company or by the owners of 5 per cent of its total debt. The court selects a temporary trustee from a list of nominees submitted by the Interstate Commerce Commission. Railroads that were already in receivership prior to the passage of the amendment are permitted to change over to the bankruptcy proceedings.

In the case of other corporations, the corporation, the creditors, or the trustee of a bond issue may file the petition. When the corporation takes the initiative, a petition by the management, formally authorized by the directors, states that the company is insolvent or unable to meet its debts, that it needs relief and desires to effect a plan of reorganization, and that it is willing to have its assets placed under court jurisdiction. The petition includes a statement of the nature of the business, its financial condition, and a detailed enumeration of the assets and liabilities. An indenture trustee or any three or more creditors having aggregate claims of

$5,000 or more may also file the petition, stating that the corporation is insolvent or unable to meet its debts as they mature and that a reorganization is desirable. The corporation may file an answer to the creditors' allegations within ten days, and the corporation's or creditors' petition may be contested by any creditor, by any bond trustee, or, if the corporation is insolvent, by any stockholder. If the petition is sustained, the court acquires exclusive jurisdiction of the property of the corporation, wherever it is located, and ancillary receivers in other districts are unnecessary.

Work of the receiver in equity reorganizations. In most "equity" reorganizations, the receiver has charge of the assets of the company while the reorganization plan is being worked out, but, except in rare cases, he has no direct part in formulating the reorganization plan. His task is to conserve the property pending the final outcome of the case and then to turn it back to its owners if no reorganization is necessary, turn it over to a new corporation if a reorganization is effected, or liquidate it if plans for rehabilitation fail. Indirectly, however, the receiver may play a part in the reorganization or revamping of the capital structure in several ways. If receivers' certificates have been issued, they are paid out of the new money raised by the reorganization or are refunded into securities provided by the plan. The reports of the receiver to the court aid those doing the actual work of reorganization to determine the real condition of the company's assets and earning power, upon which the plan rests. In rare cases the committees formulating plans of reorganization may ask the receiver for his opinion. But he is supposed to be strictly neutral with respect to the claims and hopes of the various groups involved.

Work of the trustee in bankruptcy reorganizations. The trustee in reorganizations under the Bankruptcy Act has a much more important role to play than the receiver in equity cases. In addition to the operation of the business while it is in bankruptcy and the performance of functions similar to those of the receiver in equity cases, his chief duties, as laid down by the Chandler amendments, Chapter X, may be summarized as follows:

1. To assemble the essential information concerning the operations, property, liabilities, finances, and desirability of continued operation of the debtor corporation. He then submits a statement to the court, the stockholders, the creditors, the Securities and Exchange Commission, and such other persons as the court may designate. It is clear that complete and unbiased information is essential to the court and other parties for the formulation of a fair and feasible plan of reorganization.
2. To investigate the past acts and conduct of the officers and

directors of the debtor corporation and report to the judge any facts relating to fraud and mismanagement. Such investigation helps to determine whether or not the former management should be left in charge of the reorganized company.

3. To review the plans and proposals of creditors and stockholders.

4. To prepare and file a plan of reorganization or a statement of his reasons why a plan cannot be effected.

One of the criticisms of the older equity type of reorganization, and of the bankruptcy type under the former Sec. 77B, was that the process of reorganization and the formulation of a plan of reorganization was controlled by the former management and its bankers and friendly receivers or trustees, often to the detriment of the investors, and that the administration of bankrupt companies which had been placed in charge of friendly trustees had often been wasteful and inefficient. To remedy this situation, the Chandler Act requires that, in cases where the liabilities are $250,000 or over, the court is required to appoint a "disinterested" trustee, who is independent of the management.' An officer, director, or employee of the company may be appointed as an additional trustee to aid in the operation of the business. When the indebtedness is less than $250,000, the judge may either appoint a trustee or leave the management in possession.

The requirement provides a means whereby the whole procedure of reorganization is brought within the court, and whereby the court, assisted by its agent the trustee, may closely supervise and control all phases of the process. Suspicions of investors that they are being exploited by the management group should be allayed. On the other hand, the danger exists that the wholly "disinterested" trustee may not be competent to conduct the affairs of the business. In most cases the trustee would do well to retain the services of officers and employees who are familiar with the affairs and problems of the concern.'

In railroad reorganizations, the trustee or trustees are selected from a panel submitted by the Interstate Commerce Commission, and their control and administration of the property is subject to the jurisdiction of the Commission

Work of committees in reorganization. In equity reorganizations the actual work of formulating the plan of reorganization is performed by committees representing the various classes of owners and creditors, and, while the powers and influence of such corn-

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[1] He must not have been an underwriter of any of the company's outstanding securities or of any of its securities issued within the preceding five years, nor an officer, director, or employee within the preceding two years.

mittees has been materially decreased by recent legislation for bankruptcy reorganizations, their organization and operation deserve attention at this point. These committees are of two general types: (1) so-called "protective" committees, formed to represent the individual groups involved,• and so to protect their class interests, and (2) "reorganization committees," formed to reconcile and to act for all classes, and to work out a plan acceptable to a workable majority of each class of stockholders and creditors. In some cases the functions of the two types of committees are performed by the same group.

Since the reorganization plan will involve at least nominal sacrifices for one or more groups, it is necessary for those belonging to each class of stockholders and creditors to band together for their mutual protection. This is particularly necessary when there is a large number of holders of each class of claims and stock. The protective committee is organized, therefore, to represent a particular group or class of creditors or owners. There may be as many committees as there are groups. In involved cases, it is not unusual to have committees representing each bond issue, the merchandise creditors, the preferred stockholders, and the common stockholders. At least two committees are invariably found, one representing the stockholders, usually dominated by the directors, and the other representing creditors.

For the most part, protective committees are self-appointed, and they may be formed even before actual failure has taken place. The management and the investment bankers take the initiative in forming a stockholders' committee. The investment banking houses which floated the issues originally and which have been associated with the financing of the corporation, and large individual holders and institutional owners, such as insurance companies, savings banks, and trust companies, take the initiative in forming bondholders' protective committees.[2] It is interesting to note that, even though the investor's security proves to be of little value, he seems to turn naturally to the house from which he bought the security for aid when the company is in difficulty, and he will prefer to deposit it with a committee on which that house is represented.[3]

There are several reasons why investment banks usually take the

' The interest of life insurance companies in railroad reorganizations formed the subject matter of an additional report of the Committee on Interstate Commerce pursuant to Senate Res. 71, 74th Cong. *Investigation of Railroads, Holding Companies and Affiliated Companies,* "A Problem of Railroad Reorganization," Sen. Report No. 25, Part 2, 76th Cong., 1st Sess., February 6, 1939.

For a nontechnical discussion of the formation and activities of protective committee, see F. J. Lisman, "Protective Committees for Security Holders," *Harvard Business Review,* October, 1934, p. 19. For a study of the domi-

initiative in forming protective committees. They may feel a measure of moral responsibility toward the investors to whom they sold the securities and may wish to retain their goodwill. They may wish to participate in, the fees allowed the protective and reorganization committees and in the underwriting commissions which will be paid if the reorganization is underwritten. Furthermore, they wish to retain their connection with the reorganized corporation and participate in its future control and financing.

When the committee has been formed, letters are sent to the holders of the securities, and notices are published in the press, inviting the holders to deposit their securities with a trust company selected to act as depositary under a *deposit agreement,* by which the committee is empowered to act for the depositing security holders. If the security holder assents to the agreement, which ordinarily provides that the committee may receive compensation, employ legal counsel, pledge the deposited securities, and in general represent the depositors, he sends in his securities and receives transferable certificates of deposit. Most deposit agreements now provide for withdrawal of securities at the option of the certificate holder if the plan of reorganization ultimately decided on does not meet with his approval, but require that he pay his prorata share of expenses incurred. Once formed, the committee selects a chairman, employs counsel, and proceeds to act for the group in the reorganization negotiations.

Prior to 1934, management and investment banking committees had the advantage over independent committees of possessing a list of the names and addresses of the security holders. They were able to circularize the holders immediately, obtain deposits of a majority of the securities, and thus dominate the reorganization. Under the present Bankruptcy Act, disclosure of the lists of stockholders and bondholders for the benefit of all interested parties may be required by the court in charge.

While the individual security holder is not required to deposit his securities with any committee, his position is weak and uncertain if he "holds out," especially if a majority of the securities of his class are deposited.[4] Should he remain a dissenter after the plan has been formulated and adopted, he will receive only what he is entitled to under the foreclosure sale, or, in reorganizations under

nant position of the investment banker in the past, see Paul M. O'Leary, "The Role of Banking Groups in Corporate Reorganizations," *American Economic Review,* June, 1939, pp. 337-344.

Since 1934, deposit agreements have been placed under the control of the court, and protective committees have been given legal status. The judge may review the terms of the agreement and restrain the exercise of any power which he finds "to be unfair or not consistent with public policy." The court is also empowered to fix the compensation of committees, depositaries, reorganization managers, and their attorneys.

the Bankruptcy Act, he will be forced to abide by the plan approved by the required majority. He is usually allowed to deposit his securities up to the last minute and may make haste to deposit them if he feels that by holding up the work of the committee he may get less satisfactory treatment than by cooperating.

The actual work of drawing up a plan of reorganization is left to the reorganization committee proper. The protective committees study the earnings reports and audits prepared by the receiver or trustee or make their own investigations. Full knowledge of the financial status of the company is necessary if the committee is to determine the bargaining power of its class of securities and the sacrifices that may have to be agreed upon.

While the receiver or trustee is operating the property and keeping the *status quo* of the various claimants intact, the protective committees make their investigations, and eventually the reorganization managers or a reorganization committee, composed of the chairmen or other representatives of the various protective committees, draw up a plan of reorganization which represents a compromise of the positions of the various groups. The main tasks of the reorganization committee are to reconcile all interests, obtain the support of the various protective committees, and put the plan of reorganization into effect. The groups making sacrifices must be satisfied that their relative position is not weakened by the proposed plan and that the plan actually provides for rehabilitation.

The bargaining power of a particular group depends upon its relative position with respect to lien, claim to income, and the prestige of its representatives. At one extreme stand the secured bondholders, who have a lien on the most important properties; at the other stand the common stockholders, who are anxious to salvage something out of the wreckage and to obtain a place in the reorganized corporation with a minimum sacrifice. The proposed reorganization plan, along with the formal reorganization agreement, is presented by the various protective committees to their security holders, usually pursuant to a clause in the deposit agreement whereby failure to withdraw securities within a certain period is considered as assent to the plan. Sometimes the members of the committee serve without compensation. The expenses of the committee are prorated over the deposited securities, which may be pledged as collateral to insure the payment of the expenses. The expenses are ultimately borne by the reorganized corporation.

Formation of plans under the Bankruptcy Act. Under the amendments to the Bankruptcy Act, protective committees may function as usual, drawing up reorganization plans for submission to the security holders and to the court. In railroad cases additional plans may be submitted by the trustee, by the debtor cor-

poration, within six months after the appointment of the trustees, by holders of 10 per cent of any class of securities, by the Interstate Commerce Commission itself, or, with the consent of the Commission, by any interested party. For corporations other than railroads, creditors, stockholders, and committees representing them may also prepare and submit plans and file amendments to the trustee's plan, but the trustee now has the primary responsibility of drawing up and submitting the plan. Hitherto the plans were originated by the management or by committees representing bondholders and stockholders. The report of the Securities and Exchange Commission which followed an exhaustive investigation of protective and reorganization committees was undoubtedly responsible for the shift in emphasis in plan making from committees to the representative of the court.[5]

Approval of the plan of reorganization. Under old-style equity reorganizations, the approval of all classes of security holders was sought in order to avoid the expensive and tedious delays which litigious dissenters could evoke. The process of dealing with dissenters through the foreclosure process is discussed later (p. 691). In theory, the holders of prime mortgage liens would command especially favorable treatment under this procedure because of their position. Actually, the formulation of plans by committees controlled by parties who are close to management and are often interested in the equity position has led to different results.

Under the present bankruptcy proceedings, the steps in the approval of railroad reorganization plans, as provided by Sec. 77 of the act, are as follows:

1. Plans are submitted to the court in charge and to the Interstate Commerce Commission by any of the persons and groups indicated above.
2. The Commission, unless it finds a plan to be *prima facie* impracticable, holds public hearings at which interested parties are heard.
3. After the hearings the Commission submits a report in which it approves the plan or substitutes one of its own. The plan must be "compatible with the public interest," which presumably means that the proposed fixed charges must be adequately covered in the light of earnings experience.
4. The plan is then certified to the court, and, after interested

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See Securities and Exchange Commission, *Report on the Study and Investigation of the Work, Activities, Personnel, and Functions of Protective and Reorganization Committees* (in seven parts, dated April 30, 1936, to May 10, 1938). *The Columbia Law Review,* February, 1938, is devoted to a discussion of these reports and to the Chandler and Lee Bills, the forerunners of the Chandler Act of June 22, 1938.

parties have had an opportunity to file objections, the court approves the plan if it is fair and equitable to all groups. If the plan is not approved, it is dismissed or referred back to the Commission.

5, The approved plan is then submitted by the Commission to the stockholders of each class or their representatives, unless the Commission has found the equity of the class of stockholders to be without value, and to the creditors of each class, unless the Commission has found that the interests of the particular class are not adversely and materially affected by the plan or that the interest of that class has no value.

6. After the plan has been accepted by two thirds of each class of creditors and stockholders to which submission is required, the court confirms the plan and files an opinion to that effect. However, even though the plan has not been accepted by the stockholders and creditors, the court may confirm it if it is found, after public hearing, that it makes for fair and equitable treatment of the claims of those rejecting it.

Note that not only are minority groups bound to accept the terms of the plan, but all may be obliged to accept it. This compulsion for dissenters constitutes a real innovation in reorganization procedure. Its purpose is to speed up the reorganization process and to eliminate the long and expensive period of bargaining and compromising which had been characteristic of railroad reorganizations in the past. However, since the passage of Sec. 77, not a single important railroad reorganization has been completed up to the time of writing, and only a few have received the approval of the Interstate Commerce Commission. [6]

The procedure of approval for plans of reorganizing corporations other than interstate railroads in bankruptcy is laid down in Chapter X of the Chandler Act of June 22, 1938, which introduced a number of significant changes:

1. A hearing is held on such plans as are submitted by the trustee and others. If the liabilities involved exceed $3,000,000, the

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Formerly, the average equity receivership consumed from three to four years. (Reorganization of 31 major roads took place between 1916 and 1933). But, of the 31 railroads which have filed under Sec. 77, only three small roads (the Copper Range, the Reader, and the Chicago, South Shore and South Bend) have emerged successfully reorganized. Although the section, as amended in 1935, requires that plans be submitted within six months, the average lapse between the filing of a petition and the offer of a plan has been a year and a quarter. "Formulation of a Plan Under Section 77," *Yale Law Journal,* December, 1937, p. 251. The delay in effecting railroad reorganizations has been attributed to the length of time required for the hearings before the Interstate Commerce Commission and for reconciliation of the various classes of investors to any one plan. But railroad earnings have been at a low ebb, and reorganizers have probably hoped through delay to avoid the drastic sacrifices which such adverse conditions would make necessary.

plan or plans must be examined and reported on by the Securities and Exchange Commission. While the Commission's report is for advisory purposes only, the court will not issue an order approving any plan until the Commission has filed its report or has chosen not to file one.[7] An advisory report may be requested by the court in cases where the liabilities are less.

2. After the court has approved a plan, the trustee (or the management, if it has been left in possession, which is permissible in cases where the indebtedness is less than $250,000) transmits the approved plan or plans to the stockholders and creditors affected, together with the court's opinion of the plan and that of the Securities and Exchange Commission. Reorganization plans of intrastate public service companies must also have the approval of the particular regulatory commissions having jurisdiction.

3. When a plan has been accepted by the holders of two thirds of each class of debt and of a majority of each class of stock (if the company is not insolvent) and when the court has rendered a final decision that the plan is fair, that it offers proper protection to all groups, and that all facts have been disclosed, the plan becomes binding on all creditors and stockholders.

Effects on Creditors and Owners

Sacrifices involved in reorganization. Since the primary purposes of financial reorganization are to scale down the fixed charge obligations and to raise new working capital, it is obvious that at least nominal sacrifices must be made by some or all classes of creditors and owners. (They may be said to be nominal because reorganization merely gives effect to losses already suffered.) The nature and seriousness of the sacrifices made by any one class depend on the position and upon the relative bargaining ability of the class. In general, they are smallest at the top of the capital structure—that is, for the secured creditors—and greatest at the bottom—that is, for the common stockholders. Bondholders whose debt is secured by valuable property and whose interest is being earned are in a position to demand that their claims to principal and interest be left intact. Bondholders whose lien is on less valuable property, on which they would be unwilling to foreclose, or who have a junior lien, or whose interest is not earned, are in a weaker bargaining position. Preferred stock is almost certain to have no earnings if bond interest is in default, and it is therefore likely to suffer also. Common stockholders, with only a residual claim on assets and earnings, are in the poorest bargaining position. It is,

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[7] In addition to making advisory reports, the Commission may be required by the court to appear as a party in any proceedings under Chapter X.

however, impossible to generalize as to what sacrifices take place in reorganization. Each case presents a different situation. Perhaps the best approach is to discuss the most frequent adjustments which are made to the claims of the various levels of claimants, in the order of general priority. Individual examples of reorganization are described at the end of the chapter to illustrate the more common procedures.

Before the most common treatment of the various classes of security holders is taken up, the possible kinds of treatment or sacrifice might be enumerated:

1. Reduction of principal or par value.
2. Reduction in the rate of interest or preferred dividends.
3. Postponement of maturity.
4. Change in kind of claim or obligation, such as change from creditor to stockholder, from prior lien creditor to junior creditor, or from secured to unsecured creditor.
5. With the preceding change in the form of instrument, there may go a correlative change in the kind of income claim, such as from fixed charge (bonds) to contingent charge (income bonds or preferred stock), or from a definite charge to the indeterminate residual claim of common stock.
6. Cash "assessments."
7. Participation in the plan through stock purchase warrants.
8. No participation whatever.

Treatment of preferred creditors. Creditors are said to be preferred when they are unsecured but enjoy a right to prior payment through some act of law. They are paid even before creditors who have a lien on assets. Under the Federal Bankruptcy Act, all taxes payable to the United States or one of its political subdivisions is a preferred liability. Wages earned by certain employees within three months before bankruptcy proceedings but not exceeding $600 per employee are preferred. State laws may give other creditors, such as judgment creditors, a priority.

As previously suggested, the expenses and debts of receivers and trustees are also a prior claim. The theory of their priority over secured claims is that they are incurred in the expectation of protecting and benefiting the creditors as a group. Without such priority, credit to carry on would be lacking, and the creditors would have to raise the cash personally to keep the business a going concern.

This philosophy has been extended in the case of public service corporations to ordinary unsecured creditors who have supplied material and services to the company for operating purposes within a short period, say four to six months, prior to receivership or the

initiation of bankruptcy proceedings (rule of Fosdick v. Schall) .[8]

Since all these claims usually total a relatively small sum and enjoy a special position, every effort will be made to pay them during the period of court administration, or the reorganization plan will ordinarily provide for raising sufficient cash to pay them. Even secured creditors will feel constrained to consent to a new claim being created ahead of their own, if necessary, to finance the liquidation of these liabilities. Any such financing will also be designed to cover reorganization expenses and money for necessary working capital and property rehabilitation not already provided by the receiver or trustee;

Treatment of secured and unsecured creditors. As between debt secured by a lien and unsecured debt, the former would be expected to obtain the better treatment. Save in exceptional cases, this rule will be followed, especially in public service corporations, which are not likely to have any unmortgaged assets of consequence in which the unsecured creditors could hope to share if a liquidation test were applied. If the reorganization is a mild one, it might be sufficient to exchange debenture debt into income bonds or preferred stock. Or, if the trouble is merely an excess of maturing debt, the pressure might be relieved by changing the debt into notes or bonds.

The general principle is to preserve priorities of claims and make the minimum of change that is compatible with the financial health of the corporation. In accordance with this idea, it is customary to continue interest on any senior bonds for which sufficient earnings are available. Bonds which go through the reorganization unchanged are said to be "undisturbed" bonds. This treatment minimizes the shock to the corporation's credit and eliminates the undisturbed bondholders from the controversies and debate incident to reorganization. Sometimes, in the interest of simplification, such senior undisturbed bondholders might be asked to exchange their obligations into a single new issue of comparable security but perhaps more inclusive in lien and possibly in a form to permit open-end financing. By employing different series, the coupons and maturities of these well-protected bonds could be preserved intact.

Even when it is necessary to disturb mortgage liens because earnings are inadequate, the relative position of the various priorities will be preserved as far as possible in reorganization. It may be difficult to observe this principle, because the liens on various properties may not be readily comparable. In each the value of the particular pledged property should be estimated. This value will

[8] 99 U. S. 235 (1878). The rule of Fosdick v. Schall has not been uniformly applied. See A. S. Dewing, *Financial Policy of Corporations* (New York: Ronald Press Co., 3rd rev. ed., 1934), pp. 1167-1172, for a brief account of the application of this rule.

depend on what it might earn independently, or what it contributes to the system's earnings, or possibly even its worth in a sale to outsiders. Certain underlying mortgage bonds with strong earning power may go undisturbed while weaker issues are defaulted.[9] If the property mortgaged is without earning power, the bond it secures may be no better than a debenture and may be treated as such in the reorganization plan.

Since exact priority may be difficult to establish, and since simplification of capital structure is sought, various bond issues may be given substantial justice by giving them varying proportions of two or more new issues created under the reorganization plan. The stronger liens would be accorded a higher proportion of the better new issue, and the weaker liens would receive more of the weaker new issue. Thus, if a corporation had four bond issues, *A, B,* C, and *D,* with diminishing investment quality in that order, they might be exchanged into a new general mortgage bond issue and a preferred stock as follows:

Old Issue	*New General Mortgage Bonds*	*New Preferred Stock*
Bond *A* for each $1000 par value....	$1000	$ 0
" *B* " " " "	800	200
C " " " "	400	600
D " " " "	100	900

While a reorganization plan must resolve the conflicts of the various creditors and stockholders and gain the approval of the court in an adjudicated reorganization, the following general rules should be kept in mind

1. Fixed charges should not be assumed beyond an amount that the corporation will probably be able to pay even in bad years.
2. Income bond interest should not exceed an amount the company is likely to earn save under adverse conditions.
3. Preferred stock dividends should not be set up, even on a noncumulative basis, unless there is a reasonable hope of earning them in the near future under average business conditions.
4. If the company is likely to require financing, other than out of retained earnings, the proposed capital structure should be sufficiently conservative to make the financing practicable. If such financing is unlikely, radical sacrifices need not be pressed upon the security holders with the same insistence.

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[9] Mortgage bonds of railroads undergoing reorganization which it is proposed to leave "undisturbed" include the St. Louis Southwestern Railway Company $20,000,000 first mortgage certificates (under all plans proposed to date) ; Erie Railroad Company $12,000,000 first 5's of 1982 (under the bondholders' plan of October 18, 1938) ; and Gulf, Mobile and Northern Railroad Company First Mortgage 5's and 5i's of 1950 (under the reorganization committee's plan of reorganization and merger dated December 19, 1939).

5. If the plan is not ultraconservative, it should contain factors, such as a sinking fund, designed to improve financial safety.

6. Since the nominal amount of common stock has little significance, the idea should be to think of it as a device for sharing the residual earnings equitably. Ultimately it is desirable to achieve a convenient market value per share. If the stock may be needed as a financing instrument, an overload of prior charges should be avoided, and a nominal or no par value should be adopted.

Use of income bonds and preferred stocks. An exchange of bonds in reorganization into either income bonds or preferred stock converts a fixed charge into a contingent charge. A further advantage is that these instruments give the creditor who accepts them a definite principal value ranking ahead of the common stock. The greater resemblance to the debt relinquished makes them more acceptable to the bondholders than ordinary common stock.

As between income bonds and preferred stock, the former has two chief advantages for reorganization purposes from the corporate point of view:[10]

1. A bond is more readily acceptable than a preferred stock. Aside from the sentimental preference for an instrument as much like the one relinquished as possible, the bondholder likes the mortgage claim which an income bond may have for the establishment of priority and the frequently obligatory disbursement of income bond interest when earnings exist, in contrast to the director's discretion in the declaration of preferred dividends even though earned. Institutional bondholders may be required to dispose of preferred stock but be permitted to retain income bonds and so be allowed the opportunity of recouping their loss.

2. Far more important is the saving in income taxes resulting from the deductibility of income bond interest. With the rise of Federal income tax rates for corporations, the saving is substantial and may increase the interest disbursement or provide an important amount for sinking fund.[11]

Possible disadvantages of the income bond for reorganization are as follows:

1. Undesirable interest payments may be forced. The payment of interest in a good year may be required by the indenture without

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[10] For a more general discussion of income bonds, see pp. 171-175; for a discussion of preferred stocks, see pp. 96-107.

[11] Other taxes, such as the capital stock tax, may also be affected by the choice between bonds and stock, but they are likely to be of minor importance. Possibly important would be the taxability as income of gains on bonds bought in at a discount. No taxable gain or loss arises from the purchase or sale by a corporation of its own stock.

any allowance for recovery from the losses of one or more bad years. Preferred dividends can be paid only from surplus, so that they would generally be passed until the company had recuperated from any losses. Or income bond interest may require a disbursement of funds desperately needed for rehabilitation which would be advantageous to the bondholders over the long run.

2. Subsequent ability to finance may be impaired. Uncritical investors may ignore the contingent nature of income bond interest and regard capital structures as excessively burdened with bonds. Moreover, income bonds are not employed for public financing and so constitute a class of security unavailable for later needs. Preferred stock may be more readily created with an open-end character and thus be available for future financing. If it is noncumulative, preferred stock may permit earnings retention that will restore the common stock more quickly to the point where it, too, can be sold and the capital structure can be kept well balanced.

Use of sinking funds. Income bonds and preferred stocks can be strengthened by suitable protective clauses. The most important of these is the sinking fund. Too often this is inadequate.[12] The aim should be to remedy possible weaknesses and then keep the capital structure sound. One device that might well be more widely used for income bonds is a sinking fund based on income available for interest rather than the balance after interest has been paid.[13] Thereby a curative factor is introduced even if income fails to equal the income interest charge. Since bonds not paying full interest would have a depressed market price, the reduced sinking fund, taking, say, one fifth of the available net, would still purchase an important amount of par value and probably benefit the bondholders more over a period of years than the disbursement of the same amount as interest. From the point of view of the corporation, the advantage is even more obvious.

However, in these well-intentioned efforts to strengthen the position of creditors in reorganization, one danger should not be overlooked. Funds may be needed by the business to maintain its

[12] One writer says: ". . . in view of the history and outlook of the Wabash and Missouri Pacific, the sinking fund provisions suggest the quixotic plan of a hobo to earmark part of his income for the purchase of a Rolls-Royce." Senate Report No. 25, Part 1, "Reorganization Plans as Causes of Recurrent Insolvencies," 76th Cong., 1st Sess., 1939, p. 15.

[13] The sinking fund in the Stevens Hotel Corporation 20-year Mortgage Income 5's of 1956 provides that annually, from one fourth of available earnings (as defined), the company will pay the sinking fund trustee up to 14 per cent of outstanding bonds. After payment of full 5 per cent interest and 14 per cent sinking fund, one third of any remaining earnings will be applied to additional sinking fund purposes and two thirds will be applied to general purposes.

position and earning power. If the capital structure is weak, earnings retention may be the only source of funds. Retained income may be more valuable to the corporation and the security holders than a sinking fund. However, management should weigh carefully the profitability of any capital expenditure when securities can be repurchased at a discount that means a high yield. In drawing up sinking fund provisions, the possible needs of the business for funds before restored financial health will permit even borrowing should be anticipated.

Leases and rental contracts. Rentals for leased property, especially in the case of railroads, may constitute an important fixed charge to be cared for in reorganization. Pending the final reorganization of the company, the receiver or trustee may accept or reject leases and other uncompleted contracts of the corporation, and the landlord is entitled to receive the reasonable value of the use of the premises during the period occupied by the receiver. Prior to 1933, the claim for the unexpired term of the lease was not provable in bankruptcy and not dischargeable in bankruptcy. Reorganization could terminate the arrangement, or the new corporation could either adopt the contract or bargain for a new one, depending on the value and earnings of the leased property. Reorganization offered real relief to corporations with heavy fixed rental charges if they led to insolvency.

The amendments to the Bankruptcy Act have clarified somewhat the status of lessors in reorganizations. The act now allows the claim against utility and industrial companies for unpaid rent to be provable in bankruptcy, and injured landlords can come into the case as creditors. Claims for injury arising out of the rejection of unexpired leases, however, are limited to an amount not to exceed the rent for the three years following the date of surrender of the premises to the landlord or the date of re-entry of the landlord, whichever occurs first, plus unpaid rent up to that date. Sec. 77, which governs railroad corporations, also includes holders of claims under unexpired leases in the creditor class, and parties injured by the nonadoption or rejection of an unexpired lease become creditors to the extent of damage or injury. But the exact status of leases rejected by a trustee is still in doubt. [14]

"In 1936, the trustees of the New York, New Haven and Hartford, which was undergoing reorganization in bankruptcy, disaffirmed the lease of the lines of the Old Colony Railroad, which had been entered into in 1893 for a 99-year period and involved a rental payment of 7 per cent on the Old Colony stock. The management's reorganization plan of the New Haven, filed in 1937, allocated two shares of New Haven stock for one of Old Colony. The Old Colony filed a claim aggregating several million dollars for disaffirniance of the lease and took the position that separate reorganization and operation was

Treatment of stockholders in reorganization. If a corporation cannot meet its debts, some would argue that there must be no real equity remaining for the stockholders. Unless it can be readily demonstrated that the trouble is purely financial and temporary, the argument would lead to the conclusion that the stockholders would be expected to relinquish their claims in reorganization, allowing all the new securities to go to creditors. This extreme position could be supported by an analysis of how little would be realized if the assets were liquidated.

However, the central purpose of reorganization is to halt the disintegrating forces of a weak financial position that tend toward dissolution in order that the business and its value as a going concern may be preserved. The value of a going concern is not easily measured by any single rule of thumb. Even a painstaking valuation (either reproduction or replacement cost less depreciation) of the various assets is inconclusive. Inability to earn a normal return will make the business as a going entity worth less than such a valuation, although reorganization will still be logical if this value as a going concern (commercial or investment value) is more than liquidation value. Or superior earning power possibilities may make the property's commercial value more than the sum of its assets. Whatever the figure may be for this value of the business as an investment—and it will always be problematical because it is dependent upon estimates of future earning power—it is the only realistic basis for determining the new capital structure and the proper treatment of the various classes of securities of the old company.

The two bases for reorganization might be appropriately called the *liquidation* and the *going-concern* theories of reorganization. (They have also been termed the *"absolute-priority"* and *"relative-priority"* ideas, respectively.[15]) The latter theory may be said to be applied whenever the common stockholders or other junior stockholders are allowed to receive securities in a reorganization that does not provide full compensation for all prior issues. This approach, which attempts merely to preserve the relative interests

preferable. The reorganization of the New Haven system will be held up until it is determined whether the holders of Old Colony stock are entitled to securities coming ahead of the New Haven common or to damages resulting from the default on dividends. If damages are to be paid, their amount must also be decided.

For a discussion of the confusing status of lessors' claims under Sec. 77, see "Lessors' Claims Under Section 77," *Yale Law Journal,* December, 1937, pp. 272-277.

[15] Bonbright explains these two theories and then cites the Middle West Utilities Company reorganization as an example of the latter in which judicial pressure "in extreme form" was exerted to save stockholders at the expense of creditors. James C. Bonbright, *The Valuation of Property* (New York: McGraw-Hill Book Co., 1937), pp. 888-889.

in the business as a going concern, has been very common Its use can be most clearly seen in drastic reorganizations in which it has appeared unwise to create even income bonds or preferred stock for the full amount of unsatisfied debt,- and common stock was given at least in part in exchange for creditors' claims. In such cases, some participation in the new common stock, even though small, has nevertheless been customary for the old common stock." Even in cases where the common stock appeared valueless, some participation has been accorded either to save the costs and delay of litigation by objecting stockholders or to induce the continuance of management interested in that issue.

The recent decision of the United States Supreme Court in the Los Angeles Lumber Products Company, Ltd., case may drastically alter the usual procedure and cause the more common adoption of the absolute-priority theory.[17] In effect, the decision holds that (a) the creditors' priority is absolute; (b) all consideration of the stockholder is excluded until the creditors' claims are fully satisfied, except where the stockholders supply new funds for the reorganization; and (c) this priority cannot be waived by voluntary action of a majority of the creditors themselves." The case has excep-

" That this idea has seemed reasonable is indicated not merely by its wide acceptance in reorganization but by its use in cases where companies obliged to sell their businesses have allowed all to participate without full satisfaction of prior claims. See the plans for distribution of proceeds of sale by the Tennessee Electric Power Company and the Memphis Power & Light Company to the Tennessee Valley Authority in May, 1939.

The Brooklyn-Manhattan Transit Corporation, which is selling its properties to the City of New York for 3 per cent bonds of the latter, has obtained the consent of its stockholders and bondholders to the following distribution:

AMOUNT OF MUNICIPAL BONDS TO BE EXCHANGED FOR VARIOUS CLASSES OF B.-M.T. SECURITIES

B.-M.T. Security	*Municipal Bonds*
$1000 of bonds.	$950.00
1 share $6 preferred stock (entitled in liquidation to $100 and accrued dividends)	65.00
1 share of common stock	24.61

" This case takes on special significance because it was delivered by Justice Douglas and is reported to represent the position of the Securities and Exchange Commission, of which he was formerly chairman, and of the Interstate Commerce Commission, as set forth in an intervening brief filed on its behalf by Solicitor General Jackson.

is Some have associated this case and the absolute-priority doctrine with the Boyd Case. Northern Pacific Railway v. Boyd, 228 U. S. 482 (1913). That case, however, might more appropriately be said to have held that no class of security holders should be allowed to obtain a greater interest in the reorganization than any class senior to it. Boyd, a general creditor, had been given no participation in the reorganization; the common stockholders had been given a place contingent upon their supplying new money. Some 15 years later, when the reorganized company had recovered, Boyd sued, and the court held that stockholders may not participate unless even junior creditors are also given that opportunity. For a fuller statement, see Hastings Lyon, *Corporations and Their Financing* (Boston: D. C. Heath & Co., 1938), pp. 685-688.

tional significance because it upset a reorganization plan after acceptance by more than 90 per cent of all security holders (including over 92 per cent of the bonds) and approval by two lower courts.

The element of uncertainty in this decision lies in the question of the meaning of "full satisfaction" for creditors. If this concept meant that creditors must receive securities with a market value at the time of reorganization equal to the full amount of their claims, the stockholders would suffer complete elimination in almost every reorganization. This interpretation is unlikely. If "full satisfaction" means an amount of securities whose "value" is to be judged by the value of the supporting assets (reproduction cost less depreciation), very different results will obtain, and the stockholder would have a much greater possibility of participation. If a third meaning is accepted—namely, that the new securities should be valued in terms of an asset valuation that is made in the light of the commercial value of the business as a revivified and going concern—still different results would be expected. Under this last standard the most variable conclusions might be arrived at by different parties, because such a valuation is dependent upon the estimated amount of future earnings, which are uncertain. Were the judgment left to those closely associated with the business, and they were imbued with that optimism which seems so essential to business survival, a valuation might be made that would justify a capital structure not much different from that under the relative-priority, or going-concern, theory. While no certain answer is possible, it seems likely that this decision and the added power of the court in reorganization matters are likely to lead to more drastic reorganization plans—that is, a more generous treatment of bondholders and other creditors and a more drastic reduction of the share accorded stockholders than formerly.

In the Los Angeles Lumber Products reorganization, the creditors were to have received a 5 per cent noncumulative preferred stock with a par value equal to one fourth of the face value of their claims; the stockholders were to have received all of a new issue of common stock. To counterbalance this concession on the part of creditors to some extent, the preferred was to have participated equally with the common after the latter had received 5 per cent. (Total proposed capitalization was 811,375 shares of $1-par preferred, a part of which was to have been used to raise new cash, and 188,625 shares of $1-par common) One argument for giving the old stockholders a share in the reorganization plan was that it appeared desirable to retain them in the business because of "their familiarity with the operation" of the business and their "financial standing and influence in the community," and because they could provide "continuity of management." The Supreme Court could

find no valuable consideration or asset in this contribution of the stockholders nor in the fact that creditors would suffer greater loss in the event of liquidation than they would through reorganization under this plan. Therefore, the court held that the plan was not "fair and equitable," as required by the bankruptcy law [Sec. 77B (f)].

The decision appears a narrow and legalistic interpretation of the concept of debt and ignores the business realities that permit compositions of debt. In the composition it is recognized that management may make a contribution in agreeing to continue to manage and save creditors from the greater losses of liquidation. The value of such a contribution is reflected in the voluntary concessions of the creditors under that form of arrangement. This point is most important in the smaller business, where the managerial interests have important stockholdings. The adoption of the absolute-priority doctrine under the decision just cited will mean either more frequent liquidation because of inability to offer such management-stockholders an inducement for a continuance of their efforts or a resort to voluntary compositions that do not require court review. A possible device for compromise that will leave the influential management out of the formal capital structure but provide an incentive may be the stock purchase warrant, which is .described below. In other cases, a profit-sharing contract may be arranged. The pathway of the voluntary composition will continue to be difficult because of the obstacle of recalcitrant minority creditors. [19]

In the case of large publicly owned corporations in, which management has little stock interest, this decision, if not tempered by later decisions or legislation, may well lead to more drastic reorganizations than have taken place in the past. In many cases stockholders, either because of superior ability in negotiation or because of ability to obstruct by litigation, have been able to retain an interest in the reorganized corporation that should have been wiped out in favor of creditors, who accepted sacrifices quite out of line with what would be expected from their position of legal priority.

Conversion features and warrants. When creditors have been asked to accept sacrifices in reorganization, they may be offered some form of compensation, the value of which is contingent upon the success of the new company. Thus, bondholders may accept a contingent claim to income in place of their fixed income; they may give up their right to interest during the reorganization period; or they may accept a lower rate of return or a return that is noncumulative. Such sacrifices inure to the benefit of the junior security holders and might be so important, if the company's subsequent

19 See p. 656

success were great, as to be unfair to the creditors concerned. By making the income bonds or preferred stock given to these creditors convertible into common stock, this potential unfairness can be avoided. Should the conversion be effected, the capital structure will be strengthened to that extent.

Stock purchase warrants, which permit the holder to purchase common stock for a period of years at a stipulated price, may perform a similar function. They may be given not only to bondholders but also to stockholders, and either in addition to other securities or, in the case of stockholders, as their sole participation in the reorganized corporation.[20] At first glance, such warrants might appear to have no value so long as the stock of the new corporation has a market value less than the stipulated subscription price. Actually, they will have immediate value dependent upon the number of years they have to run, the probability and amount by which the market price is expected to exceed the subscription price, and the time required to achieve that figure. Such warrants may well have as much value as common stock in a more generously capitalized reorganization. Stockholders sometimes object that such warrants require additional investment to make their participation effective. In answer, it may be pointed out that warrant holders who are unable to raise the necessary cash to subscribe can sell their warrants in order to realize their value.

Funds from the exercise of such warrants can generally be used to retire senior obligations if they are not needed for expansion or other corporate purposes at the time they are paid in.

Stockholders, particularly in industrial corporations, who contend that the corporation's troubles are temporary and that the value of the business under more normal conditions will readily

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"Security holders of American-La France & Foamite Corporation (reorganized in 1936 into American-La France Foamite Corporation) were treated as follows: Holders of the former company's 5Z per cent notes received new income notes, new common stock, and warrants to subscribe to new common; holders of the preferred stock received new common and warrants.

Cases in which warrants were issued to junior securities along with other securities include the Baldwin Locomotive Works, reorganized in 1937 (see p. 698) ; in the reorganization of the Middle West Utilities Company in 1935, holders of each four shares of preferred stock received one share of common stock of the new company (Middle West Corporation) plus a warrant to purchase one share of new common; holders of each 100 shares of old common stock received one new common share plus a warrant to purchase one new share.

Cases in which stockholders received warrants as their sole compensation include the reorganization in 1936 of the American States Public Service Company into American States Utilities Corporation, in which holders of $6 preferred stock received, per share, warrants to purchase five shares of new common; and the reorganization in 1937 of the Arkansas-Missouri Power Company into Arkansas-Missouri Power Corporation, in which holders of common stock received, for each ten shares held, warrants to purchase one share of new common.

show an equity for them, are enabled through warrants to realize on their hopes if they have a sound basis.[21] If their estimate of earnings possibilities is not realized during the life of the warrants, their position is extinguished by the expiration of the subscription period. This period should not be too long, lest it result in participation by the stockholders in a valuable common stock equity that has been built up solely through the sacrifices of senior security holders and earnings kept from them.

Raising funds for the reorganized company. A reorganized company may need money to rehabilitate property, to make essential improvements, to provide working capital, to pay reorganization expenses, receivers' certificates, or taxes, and, under the foreclosure method of reorganization, to pay off certain dissenting creditors. If the amount needed is not too large and the assets offer suitable security, a mortgage loan or bond issue may be negotiated. Old creditors will be willing to subordinate their claims in order to avoid making the contribution themselves.

The credit of a corporation in the process of reorganization is likely to be at low ebb, and any borrowing may be impossible or at least subject to onerous terms. For this reason the most common source of funds is an assessment of the security holders. They are already familiar with the business and are likely to cherish the liveliest hopes for its recovery. Moreover, the assessment is, as a rule, levied on the junior security holders, usually the stockholders, and is made the condition they must fulfill in order to obtain any securities in the reorganized company.

Although this process is called an "assessment," the security holders are under no compulsion to pay; therefore the value of the securities offered to them must appear greater than the amount they are asked to contribute. Since the preferred and common stocks of a reorganized corporation are likely to have a low market value, the holders would find it cheaper to buy stock in the new company in the open market than to pay any substantial assessment were it not the usual custom to give them bonds for substantially the face amount of their assessment in addition to stock. To be successful, such securities that are given to the assessed must have a market value that exceeds the amount of the assessment.

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[21] A similar device would be the creation of common stock to be held in trust for the old stockholders and to be returned to the corporation for cancellation if prior securities fail to receive a certain return. Thus the bondholders in the reorganized Windermere Hotel Company (Chicago) received an amount of 5 per cent income bonds slightly in excess of the par value of their former holdings and 55 per cent of the new common stock. The former equity owners received 45 per cent of the new common, which was to be held in trust and to be returned for cancellation if the income bonds failed to receive their interest in full at the end of five years. In 1939, the latter stock was accordingly canceled.

The reorganization plan may be underwritten by investment bankers, who for a commission agree to take up and pay the assessment for any securities not taken up by the individual security holders. If the plan of reorganization is logical, fair, and well publicized, most of the assessments will be paid by the old security holders or by those who purchase their rights.

Final Steps

Putting the voluntary reorganization plan into effect. When the work of planning reorganization is completed, the reorganization agreement by which the various groups of claimants are to assent to the terms of the arrangement is presented to the groups by the reorganization committee. Depositing security holders are given a chance to withdraw, and nondepositors are given a final opportunity to come in. The final step of exchanging the new securities for the old in accordance with the terms of the plan remains.

One method of reorganization is the voluntary, or "private," reorganization, whereby the capital structure is readjusted by private negotiation among the various groups of claimants and no formal court action is required to put the plan into effect. The creditors agree to extensions in maturity, reductions in the amount of principal or the rate of interest, or to the substitution of contingent charge for fixed charge securities. As we have seen, these private adjustments are usually possible only for small corporations with simple capital structures involving no great clashes of interest, or when the sacrifices are not serious. Major claimants must come into accord to effectuate such a plan, because there is no means for compelling minorities to accept it, as there is under the bankruptcy law. If major claimants can agree, minor ones may follow along. If they do not, the only alternative is for major interested parties to buy them out or turn to the more formal procedure that permits judicial review of the reorganization plan and then the compulsion of legal procedure.

Voluntary reorganization has the advantage of preserving to a greater extent the general credit of the corporation. Goodwill and valuable trade relations with customers are more easily maintained. Since no new corporation is formed, old and possibly liberal charter rights are retained. The expenses and loss of executives' time during a long-drawn-out period of bargaining and legal activity are avoided. The difficulty, however, is to gain the consent of all or nearly all of the creditors and stockholders to the sacrifices involved, and to deal with the dissenters who cannot be bought out.[22]

[22] The amended Bankruptcy Act now provides for voluntary adjustments and extensions of railroad debt under court supervision. See p. 655.

Reorganization through foreclosure sale. Prior to the 1933 amendments of the Bankruptcy Act, the most frequent and most effective method of putting the reorganization through and dealing with dissenters was to have the assets of the failed company sold at a foreclosure sale and bid in by the committee representing the assenting security holders. These security holders then transferred the properties to a new corporation, the securities of which were exchanged for those of the old company according to the previously arranged plan.[23] The amendments to the Bankruptcy Act have made the foreclosure sale device technically unnecessary. Nevertheless, many industrial and utility reorganization plans have been executed by means of this device since the passage of the amendments. Since it was the common procedure prior to 1933 and may still be employed, the use of the foreclosure sale device deserves description at this point.

1. *Foreclosure sale and "upset price."* As we have seen, the main purpose of the foreclosure sale is to provide a method by which the plan can be forced through in spite of the objections of dissenters or the failure of security holders to deposit, and by which these groups can be eliminated from the reorganized company. By submitting the plan to a court for review, minority and dissenting interests are presumably protected. Upon the advice of the protective committee for the issue, the trustee of one of the mortgages, usually that of the top-ranking "disturbed" issue (an issue in default), brings in a bill to foreclose and moves for a judicial sale of the property to satisfy the mortgage. The court announces that it will sell the properties of the corporation at public auction and invites bids, usually with the stipulation of an "upset," or minimum, price, below which the court will not accept any bid.

The purchase price of the assets of a corporation is likely to be substantial. The committee holding the bulk of the bonds can turn in its bonds on the purchase price for the fraction of the bid which would be distributed to those bonds, and needs to raise cash only for the fraction that would be paid to the nondepositors. In consequence, it needs much less actual cash to acquire the property than any outsiders would and so is usually able to make the most favorable bid for the property. The foreclosure sale is, therefore, a mere formality in most cases.

The purpose of setting an upset price for the foreclosure sale is to prevent a sale at so low a figure as to work an injustice to minority creditors who dissent or fail to participate in the plan. In determining the proper figure, the court is supposed to consider

[23] Companies reorganized prior to 1933 without resort to foreclosure sale include the Baltimore and Ohio Railroad (1898), the Rock Island Railroad (1917), and the American Sumatra Tobacco Company (1925).

all factors relevant to the value of the property, such as book investment, engineer's appraisals, prospective earning power, and the market value of the securities.[24] Actually the upset price is a detail, for the court is presumed to pass directly upon the major question of the fairness of the plan and express any disapproval by refusing to order a sale or by allowing objectors to intervene. Its powers are especially enlarged by recent amendments to the Bankruptcy Act. Practically, the court is obliged to recognize that, whatever valuation might appear fair on other grounds, to set the upset price above the market valuation of the securities obtainable by assenting to the reorganization plan would result in every alert bondholder electing to take cash from the foreclosure sale rather than securities. If reorganization is to succeed, the upset price must be lower than the market valuation of the securities to be allotted the foreclosing bonds. To insure successful reorganization, this rule has to be observed; to avoid loss to innocent nondepositors, it is customary to place the upset price as near as possible to the market valuation of the alternative securities allotted to them.

It is important that a maximum of the bonds being foreclosed be deposited in order to minimize the amount of cash that has to be raised to pay nondepositors.

If the court does not receive a bid equal to the upset price, it will refuse the offer. However, the upset price may be lowered subsequently if circumstances make it appear desirable.

2. *Transfer to a new corporation.* The reorganization managers or reorganization committee will charter a new corporation, with its capital structure drawn according to the plan of reorganization. The property is transferred to the new company, which issues its bonds and stocks to the old security holders and other claimants in accordance with the terms of the plan, and the reorganization is complete. The new company is usually given a name very similar to that of the old, with some slight change, such as the substitution of the word *Corporation* for *Company.* Thus, in 1927 the Chicago, Milwaukee and St. Paul Railway Company became the Chicago, Milwaukee, St. Paul and Pacific Railroad Company.

Execution of reorganization under the amended Bankruptcy Act. Under the amended Bankruptcy Act the foreclosure sale device is usually unnecessary. First, the plan is accepted by two thirds of each class of creditors, by the majority of each class of owners if the corporation is not adjudged insolvent, and by any special regulatory bodies, such as the Interstate Commerce Commission, that may have a voice. Then, if the court having juris-

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[24] A discussion of valuation for the purpose of setting the upset price is found in Bonbright, *op. cit.,* Ch. XXV.

diction is satisfied that it is fair and equitable and that all amounts to be paid by the debtor and all amounts to be paid to committees and reorganization managers are reasonable, the plan will be confirmed and will be put into effect subject to the control and jurisdiction of the court.[25]

The sections of the Bankruptcy Act governing railroad cases provide that, after confirmation of the plan, the property may be retained by the debtor corporation, or transferred to a new corporation if one is formed, free of all claims except those provided in the plan.

Dissenting groups are given more specific protection in industrial and utility cases. The recent amendments governing such cases require that the plan of reorganization must provide for protection of the value of the claims of each class of dissenting creditors (1) through the transfer or retention of the property subject to such claims, (2) by a sale of the property free of such claims at not less than a "fair upset price" and the transfer of the claims to the proceeds of the sale, or (3) by appraisal and cash payment of the claims. Stockholders of any dissenting class are also protected by the last two of these devices. Although the law goes on to provide that, when the plan is confirmed by the court, it is binding on all creditors and stockholders, provision is thus made for situations in which the holders of more than one third of a particular class of debt or of a majority of a particular class of stock do not agree to the plan.

Selection of management. Recognizing that the quality of management is as important to investors as the need for a fair and equitable reorganization plan, the Chandler Act brings the choice of the management of the reorganized industrial or utility company within the jurisdiction of the court by providing (1) that the manner of the selection of the management named in the plan shall be in the interests of investors and consistent with public policy and (2) that, in confirming the plan, the judge must be satisfied that the appointment of a particular management or the continuation of the former management in office is likewise in the interests of investors and consistent with public policy.

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[25] The present act exempts all securities issued under a plan of reorganization approved by the court from the registration provisions of the Securities Act of 1933. However, the indentures of bonds issued in reorganization must qualify under the Trust Indenture Act of 1939. See p. 127.

It is questionable whether most courts are qualified to form an intelligent judgment on a reorganization plan, because of their lack of acquaintance with complex business situations. A common practice is for the judge in charge to appoint a special master to administer the case. The opinion of the Securities and Exchange Commission and the required approval of the Interstate Commerce Commission are presumably sought in order to assure seasoned and intelligent examination of the reorganization plans.

Advantages and disadvantages of bankruptcy reorganizations. The merits and disadvantages, from the point of view of the student of finance, of the new-style reorganizations in bankruptcy as compared with the older equity reorganizations will now be taken up.

Advantages. The advantages of bankruptcy reorganizations may be summarized as follows:

1. At least some of the expensive delays and litigation due to dissenting minorities may be avoided.
2. The foreclosure sale of the old properties in an almost nonexistent market, save in the case of small concerns, is no longer necessary. However, even in bankruptcy cases it seems to be the practice to form a new corporation, as before.
3. The expense of ancillary receiverships is eliminated.
4. Lists of security holders are available to all, so that the formation of representative protective committees is facilitated.
5. The activities and expenses of protective committees are subject to court supervision.
6. Minorities are protected by the requirement that the court must approve the plan. In utility and industrial cases the Securities and Exchange Commission's report and opinion should provide investors and the court with the basis for an intelligent judgment as to the merits of proposed plans.

Disadvantages. It is still too soon to judge with certainty the comparative disadvantages of old-style and new-style reorganizations. The following points represent tentative objections that have been advanced, or difficulties that still remain in the procedure:

1. The reorganization of complicated situations, especially of railroad capital structures, is not hastened by the many hearings and examinations which the law requires. Perhaps such delays are as much the inherent result of a complex situation as the result of procedural red tape. In so far as the tardiness is due to more adequate safeguards against financial abuse, it is desirable.
2. It is possible, in other than railroad cases at least, for just over one third of a small class of creditors to hold up the reorganization by objecting to the majority's plan. Such objection may, however, represent a more adequate opportunity for the expression of legitimate minority criticism.
3. Whether a corporation is solvent, and thus whether the stockholders may have a voice in reorganization, is often the subject of considerable controversy.
4. The adoption of an absolute-priority interpretation of the bankruptcy law, as explained above, may hinder a reasonable treatment of stockholders, and possibly junior creditors, from a business

point of view that recognizes the uncertain value of a business as a going concern. Such severe treatment may lead to obstructive litigation by the affected interests, in the hope that during the delay earnings will increase and so justify their better treatment. In smaller corporations, drastic treatment of the stockholders' equity may cause the management to abandon its interest in the stock, to the ultimate injury of all classes of security holders and creditors.

From the point of view of finance, it appears that, while many innovations have been introduced in the procedure of reorganization, the basic purposes have not been radically altered. But the student who is not a legal expert is justified in feeling a good deal of consternation as he studies the growing mass of statute and case law which the new legislation has introduced. These changes make the solution of the reorganization problem dependent more upon legal considerations and less upon purely business and financial considerations.

Use of the voting trust in reorganization. The voting trust device, once used as a technique for monopoly, now finds its most frequent use in connection with corporate reorganization. Since the failure of the old corporation is often attributable at least in part to the management, and since the creditors' interest in the reorganized company is paramount and must be protected, the stock of the reorganized company is often deposited with a small board of trustees under a voting trust agreement. The trustees elect the directors and so control the affairs of the new company until it is definitely on its feet. The new stockholders receive voting trust certificates of the new company. The trustees are usually selected by the reorganization managers, whose financial support and management have made the reorganization possible, or by the bondholders' protective committees. This protection may be an important factor in inducing the creditors and the purchasers of new securities to give financial support to the reorganization.

The assurance of continuous control by this device allows for a representation of creditor interests until certain securities have been retired, the capital structure has been brought to a reasonably strong position, or recovery can be reasonably expected. The device prevents the purchase of control in the open market by outsiders, a danger that is greatest just after reorganization, when the market price of the new stocks is likely to be very low. The voting trust also permits a more expert watch upon managerial policies and a speedier change in executive personnel than would be possible under the normal system of action at annual stockholders' meetings.

Role of investment banker in reorganization. In modern reorganizations, especially those of large corporations, the investment

banker has played a very important role. The original underwriting houses often take the initiative in the establishing of protective committees. In addition, the actual work of soliciting the securities for deposit, of dealing with security holders, and of exchanging the securities of the reorganized company for those of the old is performed by the investment banks which are the reorganization managers. The underwriting of the plan, including the payment of assessments of nondepositing security holders, and the underwriting and sale of any new securities resulting from the reorganization, is a further contribution of the bankers. Finally, they may dictate the membership of the voting trust.

The changes made in industrial reorganization procedure by the Chandler Act of 1938 may inaugurate a new era in so far as the work and influence of investment bankers in reorganization are concerned. The requirement that the trustees of the larger companies in bankruptcy be "disinterested" parties means that investment bank officers and directors may not be appointed to this significant office. Any disinterested trustee is, however, likely to be unfamiliar with the operations and condition of the company and may have to rely on bankers' advice to a considerable extent. Other features of the new laws may serve to weaken banker influence. It is now illegal to solicit approval of any plan before it has received temporary confirmation from the court, so that protective and reorganization committees dominated by the management and its bankers may find it more difficult to put through their own reorganization plans. In addition, the primary duty of submitting a plan to the court now rests with the trustee. And lastly, the provisions making the plan binding on minorities may make it unnecessary to pay off dissenting bondholders, as under the foreclosure method, and thereby reduce the probable need for underwriting. These legal changes are too recent to be analyzed with certainty as to their effects, but the changing powers and position of the parties involved in corporate reorganization should be carefully followed by students and practitioners of finance.

Illustrations of Reorganization

The cases cited. In the preceding discussion of the purposes, procedure, and results of reorganization, reference to individual cases has been kept at a minimum. A few samples of reorganization will aid in a more definite understanding of the manner in which the financial structure is altered by the process.

The first example is the reorganization of an industrial corporation, the Baldwin Locomotive Works. This reorganization was completed under Sec. 77B of the Bankruptcy Act. An account of the reorganization of the Virginia-Carolina Chemical Company

tells the story of an older equity reorganization. These two cases are not to be regarded as "representative," because industrial reorganizations vary greatly according to purpose, size, seriousness, and financial details. But the Baldwin Locomotive case affords a good example of the new bankruptcy procedure and contains common features with respect to types of sacrifices required of creditors and stockholders. The Virginia-Carolina Chemical case illustrates the conversion of both current and funded debt in a very thorough scaling down of the capital structure.

In recent years failures and reorganizations of public utility corporations have been relatively rare save in the traction field. The financial position of tractions has deteriorated so considerably that they have been liquidated in many smaller communities, superseded by lightly capitalized bus companies in others, and taken over by the municipality in some major cities. [26] To provide an example of a drastic operating company reorganization, the Detroit and Canada Tunnel Company reorganization, which was completed in 1936, has been included here.

In the utility field, holding companies have been less fortunate than operating companies. Because of their greater degree of trading on equity, fluctuations are greatly magnified, and depression produces more serious consequences for them. For an illustration of utility holding company reorganization, the case of the Federal Public Service Corporation, a holding company with subsidiaries in 18 states, was selected. While not as significant from the standpoint of size or investment importance as Middle West Utilities Company and some other holding companies which have been reorganized, the Federal Public Service Corporation (now the American Utilities Service Corporation) illustrates the aims and procedure of holding company reorganization.

No group of illustrations of corporate reorganization would be representative without a railroad case, for in rail reorganizations are found the most complex cases. Since the reorganization of no important railway company under Sec. 77 of the Bankruptcy Act has been completed, the illustration offered is that of the Chicago, Milwaukee and St. Paul Railway Company, which was the last great railway system to be reorganized in equity and in many respects represents the most comprehensive reorganization case on record up to 1933. [27] The road is currently (1940) in process of being reorganized once more.

" An unusual important example illustrating the procedure and treatment of the several classes of security holders may be found in the municipalization of the New York City traction system.

" The reorganization of the Chicago & Eastern Illinois Railway Company will probably be completed in 1940 and may be studied for the more drastic form of reorganization likely to prevail in the numerous railroad reorganizations now pending.

Industrial Reorganization: The Baldwin Locomotive Works

1. *Description of the company.* The Baldwin Locomotive Works was incorporated in 1911 to take over a business originally founded in 1831. At its plant near Philadelphia it carries on its business of manufacturing steam, electric, and internal-combustion locomotives, railway car trucks, and similar heavy goods. It owns several subsidiaries, which manufacture steel, hydraulic machinery, turbines, and pumps.

2. *Causes of failure.* The failure of the leading company in the railway heavy equipment field was directly attributable to the decline in railroad earning power which began in 1930 and which led to a cessation of railway purchasing of new equipment. Although it had diversified its line of products, the company and its subsidiaries has been primarily dependent on railway equipment purchases and renovation. In 1918, 3,522 locomotives were produced, the largest number in the history of the company; in 1926, the production totaled 836; in 1929, 446; in 1932, 65; and, in 1933, 28. From a net income of $5,883,907 in 1926, earnings shrank to a deficit of $4,122,759 in 1931 and continued in the red until 1937.

On February 25, 1935, the company filed a voluntary petition for bankruptcy under Section 77B of the Bankruptcy Act in the District Court of the United States for the Eastern District of Pennsylvania. The court approved the petition and ordered the company to continue in control of its properties and to manage them subject to court authorization and control. No trustees were appointed. In March, 1935, the court appointed a special master in reorganization to act for the court in conducting the case.

3. *Reorganization procedure.* The company drew up a plan of reorganization and filed it with the court in August, 1935. In the meantime, reorganization managers had been named and protective committees had been formed for the consolidated 6 per cent bonds, the preferred stock, and the common stock. In December, 1935, the special master recommended the company's plan to the court for preliminary approval as being fair, equitable, and not unfairly discriminatory in favor of any class. It was approved by the majority committees, and in March, 1936, the company wrote to the bondholders and stockholders urging them to accept the plan and to send in their securities to be stamped accordingly. Two individual owners of common stock and a minority committee of preferred stockholders filed objections to the plan, on the grounds that it discriminated in favor of the bondholders.

In November, 1936, the special master reported to the court that the company had obtained the required number of acceptances from

each of the four classes of security holders, and in January, 1937, the court heard the arguments of the company and of the minority holders of preferred and common stock. In February the court entered a decree approving the plan, which was made final on September 1, and the writs of dissenters were dismissed. In June the stockholders had approved the changes in the capitalization required by the plan, and in September, 1937, the exchange of securities began. The new common stock was deposited in a ten-year voting trust, and trust certificates were issued to those entitled to common stock under the plan.

4. *Plan of reorganization.* The capitalization of the company had consisted of a first and a general mortgage bond issue and preferred and common stocks, as indicated in the following table. The reductions in senior securities and charges are shown in the parallel figures. The reorganization results were as follows: The first mortgage 5's remained undisturbed except that they were stamped to indicate consent to a change from a rigid annual sinking fund payment of 20 per cent of par to a $200,000 payment at the company's option; holders of the consolidated 6's had the option, for each $1,000 principal and accrued interest, of either $1,000 new refunding first convertible 6 per cent bonds secured by a second mortgage (interest could be paid on such new bonds until 1940 either in cash or in new 7 per cent preferred stock, $30 par) or 80 shares of common ($13 par) ; the preferred stockholders received, per share, three shares of new common stock and warrants to purchase two new shares of common stock at $15 per share on or before September 1, 1945 (unpaid accumulated dividends of $42 per share were waived) ; the common stockholders were to receive, for each ten shares held, one share of new common stock and warrants to purchase two shares of new common stock at $15 per share until 1945.

	Before Reorganization		*After Reorganization*	
	Securities Outstanding	*Interest*	*Securities Outstanding*	*Interest*
Sinking fund 5's	$ 2,676,000	$133,800	$ 2,676,000	$133,800
Consolidated 6's	10,435,600	626,136		
Refunding convertible 6's	—	—	6,470,900	388,254
Preferred stock	20,000,000		1,164,762*	
Common stock	9,903,300		13,360,906	
Total..	$43,014,900	$759,936	$23,672,568	$522,054

* Issued in payment of interest on convertible 6's.

5. *Results of the reorganization.* As shown in the table, the reorganization resulted in a considerable shrinkage in funded debt

and fixed charges, because holders of a substantial amount of the old consolidated 6's (38 per cent) chose to take common stock instead of bonds. Annual preferred dividend requirements were reduced by almost 95 per cent; the former accumulation was eliminated; and a capital surplus of $20,863,000 was created by the reduction in the stated value of the capital stock. And the change from a fixed to an optional sinking fund in the first-ranking bond issue afforded considerable relief. Annual interest (including interest on bonds held in the sinking fund) and sinking fund charges, prior to reorganization and after reorganization, were as follows:

	Before Reorganization	*After Reorganization*
Interest	$1,081,236	$522,054
Sinking fund	200,000	
Total	$1,281,236	$522,054

A Drastic Industrial Reorganization: Virginia-Carolina Chemical Company

1. Description of the company. The company was formed in 1895 to consolidate a number of manufacturers of fertilizers, acids, chemicals, and similar products. In addition to a number of manufacturing plants in the East and South, the company owned domestic and foreign subsidiaries, pyrite mines, and potash and sulphur properties.

2. Causes of failure. In this case failure was due to the pressure of a load of current debt and to the top-heavy funded debt and interest burden in the presence of small and fluctuating earnings. Unable to meet both its large current debt and its heavy fixed charges, the company went into receivership in March, 1924, following a suit by a creditor for $46,222.

3. Reorganization procedure. The president of the company and the counsel for Essex County, N. *J.,* were appointed receivers. As a means of raising working capital, in 1925 the receivers sold the company's stock in the Southern Cotton Oil Company for $8,875,000 and that in a German potash subsidiary for $1,250,000. In the subsequent reorganization, no provision had to be made for raising working capital. Five protective committees were formed: (1) for the holders of first mortgage bonds; (2) for the holders of 15-year convertible gold bonds; (3) for bank creditors; (4) for trade creditors; and (5) for the holders of preferred and common stock. On August 10, 1925, the final plan of reorganization was adopted.

4. Plan of reorganization. The current debt and capitalization of the company before and after reorganization were as follows:

(in millions)

Before Reorganization		*After Reorganization*	
Bills and accounts payable	$21.5	7% prior preference stock	$14.5
First mortgage 7's of 1947	24.5	Participating 6% preferred	21.4
Convertible 7i 's of 1937	12.3	Common stock and surplus (486,700 shares, no par)	3.5
Subsidiary preferred stock	.4		
Virginia-Carolina preferred stock	21.6		
Common stock—Classes A and B (349,805 shares, no par) ...	12.2		

The plan of settlement was as follows:

Old Claim	*To Receive in Reorganization*
$1,000 first mortgage 7's and unpaid interest	$510 cash plus $595 par 7% prior preference stock
$1,000 convertible 7i's and unpaid interest	$1,225 of 6% participating preferred plus 20 shares of no-par common.
$1,000 trade and bank debt and unpaid interest	$1,160 of 6% participating preferred plus 20 shares of no-par common. (Trade debts of less than $1,000 were paid in cash.)
$1,000 subsidiary preferred and accumulated dividends	$1,245 of 6% participating preferred plus 20 shares of no-par common.
$100 Virginia-Carolina preferred	One-half share of no-par common.*
Each share of common stock	One-fifteenth share of no-par common.*

* Also right to buy one-half share of no-par common within 30 days at $10 per share from stock allotted to other security holders.

A new Virginia corporation, the Virginia-Carolina Chemical Corporation, was formed March 24, 1926, and acquired the business and properties of the former company by foreclosure sale.

5. Results of the reorganization. As a result of the reorganization, the funded and current debt was either paid off or exchanged into stock, and fixed charges were replaced by contingent charges. Two types of preferred stock replaced the former bonds. The stronger, or prior preference, issue went to the mortgage bondholders, and the weaker participating preferred went to unsecured creditors and subsidiary preferred stockholders. The reduction in the former Capital Stock account created a substantial surplus, which was utilized to write down the fixed assets to one third of their previous book value. The proceeds from the sale of unnecessary assets, together with certain cash on hand, permitted the unusual feature of the plan—namely, the partial repayment of the secured bond issue. The following condensed consolidated balance

sheet, which shows in comparative form the assets and liabilities before and after reorganization, gives a summary picture of the changes effected.

Comparative Consolidated Balance Sheet in Condensed Form as of December 31, 1924, and June 39, 1926

(in millions)

Assets	*1924*	*1926*	*Liabilities & Net Worth*	*1924*	*1926*
Current	$46.0	$22.2	Current Liabilities	$27.0	$ .6
Fixed	52.0	16.1	Funded Debt	36.8	—
Miscellaneous	6.4	2.1	Subsidiary Preferred	.4	
			Preferred Stock	21.6	35.9
			Reserves	2.7	.4
			Common Stock	12.2	3.5
			Surplus	3.7	
	$104.4	$40.4		$104.4	$40.4

A Drastic Utility Reorganization: Detroit and Canada Tunnel Company

1. Description of the company. This company was formed in 1927 to build and operate an automotive tunnel, one mile in length, under the Detroit River from the business district of Detroit to that of Windsor, Canada. The company was given a franchise for 60 years, subject to the right of each city to purchase its respective portion of the tunnel after 20 years from the date of opening, on a reducing graduated scale over the next 40 years.

2. Causes of failure. The company's earnings had never been adequate in terms of its capital structure. Burdened with a top-heavy financial structure, for it had raised most of its capital through the sale of bonds, it soon appeared that there was not enough international traffic to support the company and its competitors, the Detroit Windsor Ferry Company and the Detroit International Bridge Company. The latter had opened its bridge in 1929 and defaulted on its bonds in 1931.[28] A drastic reduction in debt and interest was called for.

3. Reorganization procedure. On May 2, 1932, the president of the company was appointed receiver by a Federal court, debenture interest having been defaulted in November, 1931, and mortgage bond interest having been defaulted on May 1, 1932. Committees were immediately formed to represent the mortgage and debenture

" In the summer of 1936 the company and its chief competitor, the Detroit Windsor Ferry Company, made joint application to the Interstate Commerce Commission for permission for the tunnel company to acquire the ferry business for $150,000 cash and $750,000 5 per cent bonds, on condition that after the sale the ferries would cease to operate. The Commission denied the application on July 27, 1938.

bonds, and they began to call for the deposit of securities pending the working out of a plan of reorganization. In the spring of 1935 the receiver announced that the case had been switched to bankruptcy proceedings and that he had been made permanent trustee. Creditors were instructed to file claims with the trustee. Finally, in November, 1936, the court confirmed the plan of reorganization agreed upon by the bondholders' committees. The assets were transferred to the successor company, the Detroit and Canada Tunnel Corporation, which had been previously incorporated.

4. Plan of reorganization. The plan was drastic, as befitted the needs of the case. Of the company's total capitalization of $24,300,000, $17,000,000 had been funded debt. The reorganized company emerged with a funded debt of only $2,550,000. The holders of the old 6 per cent first mortgage bonds were given $300 in new 5 per cent sinking fund mortgage bonds and 12 shares of no-par common for each $1,000 of principal and accrued interest. Holders of old 62 per cent debenture bonds and of general claims received 3 shares of new common for each $1,000 of par value and accrued interest. The annual interest charges were thus cut from $1,061,915 to $127,500. No provision was made for the old common stock.

5. Results of the reorganization. The earnings since reorganization have been large enough to meet the new interest requirements, and it appears now that the plan was sufficiently drastic. Interest was earned 1.8 times in the 12 months ending October 31, 1937, the first year after reorganization.

Public Utility Holding Company Reorganization: The Federal Public Service Corporation

1. Description of the company. Incorporated in Delaware in 1927 with broad powers, in 1932 the Federal Public Service Corporation had 35 subsidiaries providing 286 communities in 18 states with gas, electric, water, ice, and telephone service.

2. Causes of failure. The underlying causes of failure of the company can be summed up in one word—overpyramiding. From inspection of its statements, it is apparent that for some time the financial position of the company had been vulnerable to declining earnings. In 1930, the holding company earned just enough from dividends paid by subsidiaries to cover its own expenses and interest and meet its own preferred dividends. In 1931, in the face of declining earnings, it continued to pay dividends on its preferred stock, although it had no net income. This policy may have been followed because much of the preferred had been sold to customers in its subsidiaries' territory. With a working capital deficit, the company could not meet the maturity of $7,000,000 of 6 per cent convertible gold notes (debentures) due on July 1, 1932.

3. Reorganization procedure. In May, 1932, the president of the company and a lawyer were appointed receivers. Committees were formed for the holders of (1) first lien gold 6's of 1947, headed by a representative of H. M. Byllesby Company, the company's investment bankers; (2) 6 per cent convertible gold notes; and (3) preferred stock. A reorganization plan developed by the bondholders' committee was subsequently approved by a majority of bondholders and stockholders. It was declared operative in April, 1934, and was approved by the Federal Court when 90 per cent of the senior securities had been deposited. In October, a successor, the American Utilities Service Corporation, was incorporated. In February, 1935, the case was switched to bankruptcy proceedings and put into effect.

4. The plan *of reorganization.* The plan eliminated a large part of the funded debt and fixed charges. Holders of $1,000 of the 6 per cent first lien bonds ($10,500,000) received $500 in new 30-year 6 per cent collateral trust bonds, $250 in 6 per cent preferred stock ($25 par), cumulative after three years, and 42 shares of new no-par common The holders of the company's secured loans ($650,000) received par for par in 6 per cent secured serial notes. Holders of the old convertible debenture notes ($7,000,000) received 80 shares of common stock for each $1,000 of their debt. Preferred stockholders got three shares of new common for each share of old stock, and no provision was made for the old common

5. Results of the reorganization. As a result, total funded debt was reduced from $18,150,000 to $5,900,000, and fixed charges were reduced from $1,089,000 to $354,000. Since the holding company's lowest earnings available for interest amounted to $396,000 for 1933 (on a consolidated basis), even after the receiver had doubled the annual depreciation charges of the subsidiaries, the plan was effective in shrinking the capitalization to a point where the danger of default on bond interest became remote. The common stock was placed in a ten-year voting trust managed by trustees selected by the bondholders' committees.

Railroad Reorganization: The Chicago, Milwaukee and St. Paul Railway Company[29]

1. Description of the company. At the time of its receivership in 1925, the Chicago, Milwaukee and St. Paul Railway system, operating 11,205 miles of road in 12 states, was the third largest aggregate of railroad mileage in the country, extending from Chicago to Seattle, with many arteries running south and west to Omaha, Kansas City, and the Black Hills region. Originally one

" For the Interstate Commerce Commission's discussion of this case, see *Investigation of Chicago, Milwaukee and St. Paul Railway Co.,* 181 ICC 615 (January 4, 1928).

of the "granger" roads, it began its extension to the Pacific Coast in 1906, and as late as 1921 it continued its policy of expansion in the acquisition of the Chicago, Terre Haute and Southeastern Railroad. The outstanding capitalization of the system as of June 1, 1925, amounted to $702,864,396, or $63,000 per mile of road. Of this, $469,521,196, or about two thirds, consisted of funded debt, and $233,343,200, or about one third, consisted of stock. The company had failed to earn its total fixed charges in every year after the termination of Federal control in 1920, except for 1923.

2. *Causes of failure.* The company faced bond maturities of $53,000,000 during 1925 and $240,000,000 during the ten years 1925 to 1934. Fixed charges in 1924 amounted to $20,500,000, whereas earnings available for fixed charges totaled only $18,700,000.

Out of the welter of statements, investigations, and official reports which emerged in the case, the following causes of failure may be summarized. They are divided somewhat arbitrarily into those attributable to management and those over which management had little or no control:

Managerial causes:

(1) The increase in interest and operating expenses caused by the western extension, which, up to 1925, had cost $257,000,000 and had been financed largely through bond issues. Of this division, 657 miles had been electrified at a cost of $14,000,000. Traffic on the western extension failed to justify the investment, although in 1905 it appeared to be necessary in order that the Milwaukee might participate in the through business from the Pacific Coast to Chicago.

(2) Acquisition of the Chicago, Terre Haute and Southeastern in 1921, with the assumption of $18,000,000 in bonds. This coal road was needed by the St. Paul, and its purchase was perhaps justified.

(3) Prodigality in the payment of dividends. From 1908 to 1917 inclusive, 97 per cent of net income had been distributed.

(4) Excessive use of bonds. At the time of failure two thirds of the capitalization consisted of funded debt.

Nonmanagerial causes:

(1) Decline in freight revenues resulting from the rate reductions ordered by the Interstate Commerce Commission in 1921 and 1922.

(2) Change in the direction of grain traffic via Duluth rather than through the Twin Cities and Chicago. (3) Decline in passenger traffic due to motor competition. (4) Loss of long-haul traffic due to Panama Canal competition. (5) Post-war agricultural depression. (6) Rise in operating costs during the War and post-War period, which had not been offset by rate increases.

Whatever the causes, the fact was that the Milwaukee needed a substantial reduction in its fixed charges if it were to earn them in the future.

3. Reorganization procedure. Since it was apparent that the 1925 maturities could not be refunded, a consent receivership was arranged, and on March 18, 1925, the Binkley Coal Company, a friendly creditor, petitioned for receivership, and H. E. Byram (president of the company) and two others were appointed receivers.

Early in 1925 the board of directors, after a pessimistic engineer's report on the condition of and outlook for the company had been submitted to it, named Kuhn, Loeb & Company and the National City Company, its bankers, as its representatives in reorganization. Committees representing junior bondholders, preferred stockholders, and common stockholders were formed. On June 1, 1925, Kuhn, Loeb & Company and the National City Company, as reorganization managers working with the representatives of the committees, announced a plan of reorganization. In August, 1926, the reorganization managers announced that a sufficient majority of security holders, through their committees, had approved the final plan to make it workable. A bondholders' "defense committee" headed by Edwin C. Jameson, president of the Globe & Rutgers Fire Insurance Company, representing approximately 8 per cent of the big junior refunding issue, had actively fought the managers' plan all along on the grounds that the Kuhn, Loeb—National City plan was inequitable to the junior bondholders. However, this committee was overruled by the court. Holders of bonds and stock who had not deposited their securities by January, 1928, were given until February 16, 1928, to conform; at that date the assessments involved in the plan were to be payable. Eventually 86 per cent of the bonds affected and 75 per cent of the stock were deposited.

4. Final plan of reorganization. The plan, as finally executed, provided for the scaling down of interest charges, the raising of working capital, and the simplification of the financial structure. It may be outlined as follows:

(1) Senior and underlying bonds amounting to $181,000,000 were left undisturbed, to be assumed by the new company.

(2) Holders of junior bonds on the main line and senior bonds on branch lines, notably the Puget Sound first 4's, which were secured by a first mortgage on the unprofitable western extension totaling $231,000,000, were to receive 20 per cent of principal in new fifty-year mortgage 5's, a general mortgage junior issue, and 80 per cent in new 5 per cent convertible adjustment (income) 5's, with interest cumulative after 1930.

(3) The United States Government, which held $55,000,000 in 6 per cent collateral notes, was to receive payment in full in cash.

(4) Holders of preferred stock, on payment of an assessment of $28 per share, were to receive $24 in the new fifty-year mortgage 5's and one share of new noncumulative 5 per cent preferred ($100 par).

(5) Holders of common stock, on payment of an assessment of $32 per share, were to receive $28 in the new fifty-year mortgage 5's and one share of no-par common

(6) The $70,000,000 raised by the assessment of the preferred and common stock was to be used to pay the notes due the United States Government, provide new working capital, and cover all reorganization expenses.

The net result of the plan was to reduce the amount of fixed interest-bearing securities by $180,000,000, reduce fixed interest charges from $21,800,000 to $13,700,000 (not including the $9,000,000 of adjustment bond interest), postpone the maturity of $185,000,000 of bonds maturing in the next ten years, and greatly reduce the number of bond issues outstanding. The following table shows how the former capitalization and interest charges compared with those set up by the reorganization:

(in millions)

	Old Capitalization		*New Capitalization*	
	Par Amount	*Fixed Charges*	*Par Amount*	*Fixed Charges*
Undisturbed senior bonds	$181.4	$ 8.4	$181.4	$ 8.4
Timber loan (liquidated)	2.2	.1	—	—
Bonds exchanged	231.0	10.0		
Notes held by U. S	55.0	3.3	—	—
50-year mortgage 5's	—	—	106.9	5.3
Convertible adjustment (income) 5's	—	—	184.8	
Preferred stock	115.9		115.9	
Common stock..	117.4	—	117.4*	
	$702.9	$21.8	$706.4	$13.7

* 1,174,113 no-par *hare*.

5. *Execution of the reorganization* plan. The properties of the old company had been sold at foreclosure sale on November 22, 1926, to the reorganization managers for $140,000,000 (subject to mortgages of the undisturbed bonds), which was $17,500,000 more than the upset price. This price left nothing for nonassenting stockholders. A new company, the Chicago, Milwaukee, St. Paul & Pacific Railroad Company, was organized in April, 1927. After an extensive hearing and investigation the Interstate Commerce Commission approved the compromise plan of reorganization, and

on January 10, 1928, it authorized the successor to take over and operate all the properties of its predecessor. The Commission's order provided that no underwriting commissions should be paid in connection with the reorganization.

On January 11, 1928, the receivers were directed to transfer the property to the new corporation. The receivership was lifted, and the new corporation, with a new president, and the former president as chairman of the board, began its work. Stockholders received certificates of deposit in a five-year voting trust, the members of which were designated by the reorganization managers with the approval of the protective committees.

6. *Sequel to reorganization.* The plan achieved the purposes of the reorganization, for a time at least. In the period 1928 to 1930, the corporation earned its fixed charges and even began paying interest on the adjustment 5's. In 1929 fixed charges were earned 2.3 times; fixed and income bond interest was earned 1.3 times. But, with the decline in earnings which came in the great depression, the Milwaukee again fell into financial difficulty. It failed to earn its fixed charges after. 1929 but managed to avoid default partly with the help of loans until 1935.

In June, 1935, the Company filed a petition to reorganize under Sec. 77 of the Bankruptcy Act, and in December the Interstate Commerce Commission approved the court's appointment of H. A. Scandrett, president of the company, and two others, as trustees in bankruptcy. In July, 1936, the company formulated a plan of reorganization designed to scale down the fixed charges once more. The new reorganization will undoubtedly be far more drastic than the relatively mild reorganization sketched above.

Conclusions

The foregoing illustrations should be regarded merely as case histories rather than as ideals or models. The particular reorganization plan must fit the individual situation. The financial plan will be influenced by the condition of the business properties, the hopes of future earning power, the bargaining abilities of those representing the various security holders, the desirability of returning a management that is heavily interested in the common stock, and, as a result of recent legislation, the attitude of regulatory bodies and the courts. The new trends are likely to make it more desirable than ever for smaller corporations to reorganize on a voluntary basis outside of the courts. Larger corporations will be obliged to resort to bankruptcy proceedings because of the large number of participating security holders and are likely to see more drastic reorganizations than formerly—that is, plans that give more weight to creditor claims and less to stockholder claims.

If this estimate of the trend is correct, financial management is likely to feel even more strongly than ever that debt should be avoided. 'Preferred stock will appear more advantageous for trading on equity whenever risk of failure appears important and the management has a substantial stake in the common stock.

In general, it is advantageous to make as few changes as possible in the reorganization of capital structure. Opposition is less likely, and the preservation of relative position is easier to demonstrate. The danger of mild reorganization is that the company will be left financially weak, so that it will find it difficult or impossible to finance and will tend to undermaintain property and be unaggressive in meeting new conditions in order to continue payments to a heavy load of senior obligations. This hazard is most important for the corporation that is in need of expansion or of meeting industry changes; it is least important for the more static business.

Probably the most important device for insuring the success of a mild reorganization is an adequate sinking fund. Such a sinking fund must not be so rigid as to endanger later solvency. There is also the danger that a sinking fund may absorb income that could be used more profitably within the business or even to pay dividends that would induce conversion or to provide for refinancing that would insure a more conservative capital structure.

A drastic reorganization does not necessarily mean a major reduction in the nominal amount of capitalization or a writedown of assets. The latter steps should be taken when desirable. However, an ultraconservative writedown of fixed assets may have the very undesirable consequence of (a) depriving the corporation of depreciation allowances that would reduce taxes upon income and (b) causing the understatement of actual depreciation and therefore the overstatement of earnings and the disbursement to stockholders of sums that should be retained.

Finally, it should be pointed out that a sound reorganization will not only preserve the rights of the various groups with a financial interest in the business but will also permit the corporation to operate with the maximum of social efficiency as an economic unit.

The next chapter deals with the financial procedure of liquidation for those corporations in which the assets are deemed less valuable as a going concern than in liquidation or in which those in control find the incentive to continue operations inadequate.

CHAPTER 29

CORPORATE DISSOLUTION AND LIQUIDATION

THE two preceding chapters were concerned with remedies or treatments which may be applied to preserve the ailing business from complete and final failure. Even insolvent corporations, those whose assets are less than their liabilities or which cannot pay their debts as they mature, do not necessarily end their existence. As previously suggested, they may be preserved as going concerns either by mild or by drastic means. But so many small enterprises fail soon after their formation that it can be said that the majority of all concerns have only a very short life. Not only is there a great turnover of small unincorporated businesses, but also many corporations, whatever may be the duration of their charters, die relatively young.[1] The processes by which the corporate life is terminated and the financial problems which they involve are considered in this chapter.

Terminology

Dissolution and liquidation distinguished. A corporation is said to "dissolve" when its legal existence is ended. Dissolution is not necessarily accompanied by the sale of the assets and the distribution of the proceeds, for, as we have seen, the corporate life might end while the business continues in a merger or under reorganized form, with the properties kept intact. Nor does it occur only when failure has taken place, for the owners of a solvent corporation may wish to terminate its life and continue the business under another form of organization. Even when liquidation is contemplated, the corporate charter may be surrendered and the corporation may be dissolved as soon as operations cease but before any distribution of assets has been made.

The term *liquidation* is applied when the business is wound up and the assets are converted into cash or securities (as in the case of the sale of assets to another concern in return for its securities),

[1] For a summary of studies of mortality and turnover, see Paul J. FitzPatrick, *The Problem of Business Failures* (Philadelphia: The Dolphin Press, 1936), Chapter III.

which are distributed to the owners and creditors. Liquidation is usually the result of a financial condition which no treatment, mild or drastic, can remedy. Although solvent corporations are liquidated merely because profits are unsatisfactory, the majority of companies which reach the liquidation stage are discontinued because of inability to meet maturing debts.

Nonfailure

Liquidation and dissolution of solvent corporations. The owners of a solvent corporation may end their business upon their own initiative or under compulsion. Voluntary dissolution results if the owner-managers wish to retire from active affairs, in which case the assets may be liquidated or may be sold as a going unit. Or the decision may be made to switch the investment over to a more profitable employment before continued operation results in declining values. Management may also decide to eliminate unnecessary companies from a too complicated group.

Involuntary dissolution of the solvent concern may follow the revocation of the charter by the state as a result of the commission of *ultra vires* acts or failure to meet the requirements with respect to incorporation and other taxes. Or the charter may have expired and may not have been renewed. Dissolution may also be the result of court order, such as may follow violation of the antitrust laws, or the requirements of special legislation, such as the Public Utility Holding Company Act of 1935, which requires the dissolution of certain holding companies.

Certain obstacles may prevent the liquidation of a company. Corporations whose assets are of a fixed and specialized nature may be kept alive even though they are operating at a loss, provided they have liquid resources or credit sufficient to keep them going, because there is no ready market for the properties. Railroad and utility corporations are sometimes obliged by their respective regulatory commissions to operate unprofitable property because of its importance to the public service. Or the court may refuse permission to dissolve if the purpose is to destroy a guarantee contract.

Once dissolution is decided upon, and any necessary permission, such as from a regulatory body, is obtained, the procedure must follow the legal regulations laid down by state law. While it varies somewhat from state to state, the general course of events is as follows:

1. The directors' resolution to dissolve is approved by the owners of the required percentage of stock. Most of the states require a two-thirds vote of the stockholders; in some, only a bare majority is required.

2. The statement of intent to dissolve is filed with the appropriate state authority, such as the Secretary of State.

3. Creditors are notified so that all claims may be presented, and the assets are sold.

4. Creditors are paid off or otherwise cared for. (a) Secured creditors are satisfied first out of the respective properties pledged, or the buyer of the property may assume the debt. Any secured debt remaining unsatisfied becomes part of the general debt and ranks along with unsecured debt with respect to the general assets. (b) General creditors are satisfied out of general assets.

5. Any balance left after debts are paid is distributed among the stockholders. Preferred stock and classified common stock, if any, are satisfied in accordance with the charter provisions in regard to preference as to assets. In voluntary dissolution, preferred stock usually receives par or a stated dollar value, plus a premium equal to that found in the call price, and any accumulated dividends if the stock is cumulative. In involuntary dissolution, the limit is generally par or a stated dollar amount, plus any accumulations.[2] If no preference as to assets is stated in the charter, preferred and common stocks share alike.

6. Remaining cash or property (such as securities in the case of the dissolution of holding and investment companies) is distributed to the common stockholders share for share.

7. Articles of dissolution setting forth the satisfactory ending of the business are filed with the state. Upon their approval, a certificate of dissolution is issued, and the corporation ceases to exist.

The share received by the stockholders depends, of course, upon the amount which is-realized for the net assets. A slow liquidation usually results in higher values, since there is more time for finding the best available market for the various types of assets. And, if the properties can be sold as a going concern, the best results are likely to be realized. In this case, the stockholders may profit most by accepting securities, for the buyer may be willing to offer securities with a market value, or at least a potential value, that is much greater than the amount of cash he would offer, since cash may be difficult or inconvenient to raise.

Once the act of closing up the business has been decided upon, dissolution may take place, and the corporation charter may be surrendered immediately. Subsequently the directors will become trustees of the corporation's property. They must take care not to enter into new transactions and must confine their activities to those steps necessary to liquidation. For this purpose the business will

See p. 105.

continue' to function as a corporate entity until its affairs are terminated.[3]

Partial liquidation. Sometimes a corporation that is able to meet its maturing obligations is nevertheless in such a weak position that its bonds may sell in the market at a substantial discount. When earnings are sufficient, their most profitable use may well be in the repurchase of the debt. But it may be desirable to go further and divert any assets that can be spared for debt retirement, thereby effecting a form of partial liquidation. If successful, such a policy would improve the position of both the corporation and the remaining bondholders.[4] Care must be had not to weaken the working capital position or to allow the property to deteriorate to the point of injuring the remaining security holders. Failure to observe these precautions would have the effect of giving a preference to the creditors whose securities were repurchased.

A similar advantage might lie in the redemption of preferred stock. However, preferred stock offers no threat to solvency, and there would not be the same pressure to retire it. The directors may find themselves restrained by the general rule that stock may not be repurchased in an amount (cost) that exceeds surplus. When desirable, this difficulty might be overcome by appropriate action of the stockholders. Stock should never be repurchased unless indebtedness is negligible or the company is in a very strong position. Otherwise the proper use of the funds would be to pay off liabilities.

When neither preferred stock nor an appreciable debt is present, an excess of free cash or marketable securities may raise a question of proper utilization for a company that lacks normal earnings. Because earnings and dividends are given primary emphasis in the valuation of stock, their absence may cause market value to decline to an extremely low level even in relation to the liquidation value of the assets. In such a situation the directors should recognize their obligation to the stockholders to take such steps as will most benefit the market.[5] The company may use its free funds to buy

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For a fuller discussion of the legal steps, see Hastings Lyon, *Corporations and Their Financing* (New York: D. C. Heath & Co., 1938), Chapter VII, "Termination of the Corporate Group."

Thus, a number of the Joint Stock Land banks used proceeds from the liquidation of farm mortgages during the 1930's to redeem their outstanding bonds at such substantial discounts that their market standing was restored. See *Annual Reports of the Farm Credit Administration,* section on Joint Stock Land banks A number of industrial corporations used working capital that was released during the depression years 1930-1933 in the same way on a less spectacular scale. Occasionally, a company found itself pressed for current funds when the ensuing upswing in business and the price level made a larger investment in receivables and inventory necessary.

For a strong, possibly an extreme, statement of the duty of directors in

stock at the depressed level or to declare a liquidation dividend, if it is assumed that a lack of earned surplus prevents ordinary dividends. The first course has the advantage of removing from the market that stock which is least valued by its owners and so is likely to have a maximum effect in raising the market price. On the other hand, the payment to all of a liquidation dividend avoids the danger that directors may be charged at a later time with giving those whose stock was redeemed a preferential treatment by draining good current assets for their benefit and leaving a balance of operating assets of more doubtful value for the other stockholders.

If a large sum is available, the directors may choose to put the stockholders on notice of their action by requesting that stockholders submit tenders of any stock they might wish to sell.[8] More commonly, purchases of stock have been made in the open market. This method avoids the expense and care of formal request for tenders.[9] Such purchases, if timely, may serve to increase not only the immediate market value but the long-run asset and earnings value per share.

Failure : Private Settlements

Liquidation and dissolution resulting from failure. The problems of liquidation and dissolution arise most frequently in the case of corporations which end their existence because of technical insolvency. Different methods may be employed to achieve an orderly settlement of their debts. These include friendly, private processes as well as the more conspicuous and public procedure of bankruptcy.[10] The private methods include ordinary friendly settlements with creditors and assignment of assets.

The private settlement is more satisfactory than bankruptcy, provided that all the creditors agree on the arrangement. The process is quicker, more efficient, and less wasteful than bankruptcy proceedings. In cases of friendly adjustment, including

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this matter, see Benjamin Graham and David L. Dodd, *Security Analysis* (New York: McGraw-Hill Book Co., 1934), p. 515.

[8] In 1934, the American Agricultural Chemical Company sought tenders for its common stock, which was selling for less than the net current assets per share. A total of 85,700 shares of the 228,000 shares outstanding was purchased. The corporation paid all sellers the highest price at which tenders were accepted.

[9] For a study of both preferred stock and common stock purchases, see Walter A. Holt and Edwin L. Morris, "Some Aspects of Reacquired Stock, 1931-1933," *Harvard Business Review,* July, 1934, pp. 505-510.

[10] Receivership in equity might be considered along with bankruptcy as a type of court procedure leading to liquidation. However, since the essential idea of receivership is to preserve the assets and keep the company from actually liquidating, it has been treated in Chapter 27 as one of the remedies for failure rather than as a means of liquidation. Receivership may fail in its purpose, however, and the business may be liquidated by the receiver.

those involving the use of adjustment bureaus, creditors may expect to receive several times the amount of liquidating dividends paid in bankruptcy cases. But bankruptcy proceedings are necessary if some of the creditors hold out for a preferential share or for full payment and attempt to seize an advantage at the expense of the others. Such proceedings are most likely to be resorted to if the number of creditors and their geographical distribution make common action impossible.

Simple settlements with creditors. In many respects the most satisfactory method of settling the affairs of the failed corporation is for the owners to remain in charge of the properties and to liquidate them slowly, making ,a settlement to the satisfaction of all of the creditors. The owners are, in effect, the trustees of the creditors in such a case. But the owners are not likely to be entrusted with the liquidation unless the creditors are mostly holders of bank and trade payables, are few in number, and are satisfied that the management can obtain the highest possible values from liquidation. Such confidence is generally lacking.

Assignment of assets. An assignment of assets is a more formal method of settling creditors' claims. It is used by smaller concerns and has the advantage of preserving the gains from a more orderly liquidation. In this procedure the assets are assigned or transferred to a trustee, often selected by the corporation, for the benefit of the creditors, to be liquidated and distributed by him in proportion to the various claims. All creditors must agree to the terms of the settlement. The main disadvantage of this arrangement is that the assignment constitutes an "act of bankruptcy," and any creditor not consenting to the settlement has the right to institute bankruptcy proceedings. But, since all creditors would share alike, they have little reason to object except out of suspicion of the assignee. This hazard suggests the advantage of known and respected assignees, such as adjustment bureaus established by credit men's associations and trade organizations.

Assignment through adjustment bureaus. In an effort to avoid the stigma and costs of bankruptcy, the facilities of existing business men's organizations are frequently used to wind up the affairs of the failed business. One of the adjustment bureaus operated or sponsored in the larger cities by member associations of the National Association of Credit Men may be selected by the creditors to act as assignee in liquidating the property. The bureau, or its representative, acts as an intermediary between the debtor corporation and its creditors. If an extension or composition cannot be arranged, and liquidation seems inevitable, the debtor may convey its property to the representative of the bureau, who sells the property, pays the necessary expenses of the proceedings, and distributes

the proceeds pro rata among the creditors.° In consideration for this action, the creditors agree to release the debtor company from further liability.

The results of the use of these bureaus suggest the superiority of this method of settlement over the ordinary bankruptcy proceedings. The liquidating dividends paid to creditors have generally been much higher than could have been obtained by insisting on bankruptcy, owing to the bureau's organized facilities, its wide experience, and its available staff of appraisers and attorneys.[10]

The most satisfactory results may be achieved through the use of adjustment bureaus when the creditors are concentrated locally and when the assets are mainly in the form of inventories and receivables. The main disadvantage of the assignment device is, again, that all creditors must agree on the plan of settlement, and recalcitrant creditors may force the corporation into bankruptcy.

Bankruptcy

Meaning and purpose of bankruptcy. "Bankrupt" corporations are those which have been declared bankrupt by a Federal court, the customary grounds being that debts cannot be paid and that definite court procedure is necessary for the settlement of the obligations. If all hope of continued operation is abandoned, and a voluntary settlement or assignment cannot be arranged, an orderly process of liquidation under court jurisdiction is the last resort. Bankruptcy provides this orderly process.

Prior to 1933, unless a composition was accepted, bankrupt corporations were liquidated. However, as stated in the preceding chapter, recent amendments to the Federal Bankruptcy Act permit "bankrupts" (known as *debtor corporations)* to be reorganized, so that the term has lost its precise original meaning and purpose.[11] The National Bankruptcy Act, passed in 1898, was designed to relieve the honest but insolvent debtor from further obligation and protect him from unscrupulous creditors, as well as to provide creditors with more equal treatment through a proper distribution of the debtors' assets in accordance with their proved claims. Many

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◦ The adjustment bureau frequently undertakes the task of working out an extension or composition of creditors' claims in an effort to prevent complete liquidation. In this respect, the use of the bureau may be considered a treatment for failure rather than a device to effect liquidation.

[10] See Albert F. Chapin, *Credit and Collection Principles and Practice* (New York: McGraw-Hill Book Co., 2nd ed., 1935), Chapter XIX.

[11] The term *bankruptcy* is said to be derived from the fact that early money changers used benches (banks) on which to carry on their business of exchanging coins. When the money changer was unable to meet his obligations, his irate creditors drove him out of business and literally broke, or ruptured, his bench.

amendments have been made to the act; the more important provide for rehabilitation rather than liquidation.

Bankruptcy may be voluntary or involuntary. *Voluntary bankruptcy* results from the petition of the debtor (in corporations, of the directors) that, being unable to meet his debts, he be adjudged bankrupt. In so doing, he is prevented from being discharged from his debts through another bankruptcy proceeding within six years. Such cases greatly exceed those of *involuntary bankruptcy,* wherein three or more creditors with provable claims of $500 or over take the initiative in filing the petition. To be declared an involuntary bankrupt, the debtor must have committed one of the following acts within the four months preceding the petition:

1. Transferring or concealing assets with intent to defraud creditors.
2. Transferring property to one or more creditors with intent to prefer such creditors over the others, while insolvent.
3. Permitting a creditor to obtain preference by legal proceedings—that is, through liens or judgments—while insolvent.
4. Making a general assignment for the benefit of creditors.
5. Suffering the appointment of a receiver or trustee to take charge of the property, while insolvent or unable to pay debts as they mature.
6. Admitting in writing the inability to pay debts and willingness to be adjudged a bankrupt on that ground.

As defined by the act, insolvency means that the assets of the debtor, at a fair valuation, are insufficient to pay his debts.

Any natural person, except a wage earner or farmer, and any corporation, except a building and loan association or a municipal, railroad, insurance, or banking corporation may be adjudged an involuntary bankrupt. As we have seen in our discussion of reorganizations, railroad corporations may declare bankruptcy voluntarily. Moneyed corporations are subject to special legislation with respect to their liquidation and dissolution.

Before 1933 the voluntary composition was the only device by which the bankrupt business could be rehabilitated and liquidation could be avoided, and it was practically limited to small businesses. But the amendments that have been made to the Bankruptcy Act in recent years have extended the rehabilitation possibilities to a number of business groups:

1. The act provides that *compositions and extensions in bankruptcy,* offered by the debtor either before or after an adjudication in bankruptcy, may be arranged for the settlement of the unsecured debts of the small business.

It will be recalled that the voluntary, or "common-law," composition, which was described in Chapter 27, rests for its success upon the agreement of creditors to the terms of the settlement, for no creditor may be forced to take a partial payment. Compositions in bankruptcy, however, are binding upon all creditors if a majority of them agree to the terms of the settlement and it is approved by the court. This arrangement, which corresponds substantially to reorganization, is designed to avoid the delays and expense of complete bankruptcy proceedings, including the forced sale of assets.

2. Interstate railroad corporations may now be reorganized in bankruptcy along the lines outlined in the previous chapter or may effect an extension or modification of debt under court supervision (see p. 655).

3. Business corporations other than railroad companies are also permitted to reorganize in bankruptcy under a new-style type of reorganization that has almost entirely supplanted receivership and equity reorganizations for all but the small concerns.

Reorganization in bankruptcy was considered in the preceding chapter, and the discussion here is confined to the procedure of bankruptcy in its original sense—that is, as a process of liquidation.

Bankruptcy procedure. After adjudgment of bankruptcy, whether as a result of voluntary or involuntary action, the procedure is ordinarily as follows: (1) A meeting of creditors is held; (2) claims are filed and allowed; (3) a trustee is elected, or appointed by the court (in the meantime a receiver in bankruptcy may have been placed in temporary charge of the assets) ; (4) the assets are liquidated; (5) the final accounting and distribution is made; (6) the final report is submitted to the court, and a petition for discharge is filed and, if not successfully opposed, is granted.

The court may appoint a *receiver in bankruptcy* to take charge of the property temporarily and conduct the business until the petition is dismissed or until the trustee in bankruptcy is elected or appointed. Receivership is particularly necessary if the assets are subject to rapid waste or loss in value.

The case is administered by one or more *referees,* who are appointed by the court for a term of not more than two years. The referee calls a meeting of the creditors, the claims are proved, and the creditors are given the opportunity to elect a trustee. The referee examines the schedules of property held by the bankrupt, examines the creditors' claims, compiles the records of the proceedings, serves as a source of information to all parties concerned, declares the "dividends," giving notice to the trustee of the declaration, and acts as arbiter in disputes between debtor, and creditor. Unlike the receiver and trustee in bankruptcy, who have actual

charge of the property, the referee is simply the administrative representative of the court in charge of the proceedings.

The *trustee in bankruptcy* (or trustees—there may be one or three) is the representative of the creditors, appointed by them, or by the referee if they fail to agree on a selection. His main duties are to take title to the assets in place of the bankrupt, liquidate them, and pay liquidating dividends within ten days after declaration by the referee, unless a composition in bankruptcy has been agreed upon. If the receiver's ability and efficiency are considered satisfactory, the creditors sometimes elect to continue him as trustee.

The Bankruptcy Act stipulates the priority of established claims in the distribution of assets, as follows:

1. The actual and necessary costs of preserving and administering the estate.
2. Unpaid wages earned within three months prior to the filing of the petition in bankruptcy, not exceeding $600 for each claimant.
3. Taxes due the United States or any state or subdivision thereof.
4. Secured claims with respect to the proceeds realized from specifically pledged assets.
5. General, or unsecured, debts, which include any unpaid balances of secured claims from their respective pledged assets.

Advantages of bankruptcy. As a method of liquidation, bankruptcy offers certain advantages over the less formal methods. The filing and proving of claims and the distribution of the proceeds from the sale of the assets is carried on in an orderly fashion. Because of the formal supervision by the court, each creditor gets his share of the assets, and preferential treatment of particular creditors arising out of fraud or concealment of assets is avoided. From the point of view of the honest debtor, the advantage is that he is relieved of further obligation by his discharge from bankruptcy.[12]

Criticism of bankruptcy. Criticism has been levied against the inefficient and expensive administration of the debtor's properties and the faulty appraisals which have resulted from the appointment of political favorites as receivers, trustees, experts, and attorneys. Courts have often concentrated such appointments in the hands of political "friends of the court." And, even though no political influence may be involved, the placing of receivers and trustees who lack the proper business training in charge of handling

[12] "Debts not released by a discharge in bankruptcy include, among others, taxes, liability for obtaining property by false pretenses, wages earned within three months prior to the commencement of bankruptcy proceedings, and all debts incurred after the petition has been filed.

specialized properties results in inflated costs and lower liquidating dividends. In addition, the forced sale of assets for what they will bring results in low liquidation values. A study published in 1934 reveals that, of the 631,439 recorded bankruptcies (including non-commercial) in the period June 30, 1920, to June 30, 1933, 58 per cent represented cases in which there were no realizable assets. Creditors of all classes received only $815,000,000 on claims of $10,800,000,000, or 7.5 cents on the dollar. Expenses of liquidation amounted to 28.5 cents for each dollar paid to creditors.[15]

The experience of creditors in the liquidation of insolvent concerns demonstrates the need for more efficient and reliable methods. The low returns and high costs which have resulted, especially on unsecured claims, and even in the better-handled cases, suggest that creditors should use every means of sustaining and reviving the ailing business before they force it into bankruptcy.

When this last resort is unavoidable, creditors should cooperate to secure active, economical bankruptcy officers and a better administration of bankrupt estates.

Conclusions

In concluding, the need for greater alertness as to the possible advantages of partial or total liquidation should be stressed. From the point of view of society, funds may be returned to investors, so that they may be used in more profitable directions. From the standpoint of the controlling stockholders, the retirement of prior securities or of common stock by partial liquidation may increase the value of the remaining shares and prove to be the most profitable use to which available funds can be put. Complete liquidation may have the merit of preventing a further dissipation of property values.

[15] L. P. Starkweather and F. L. Valenta, "Five Cents on the Dollar," *Barron's*, May 14, 1934, p. 3. For a similar analysis, see FitzPatrick, *op. cit.*, pp. 55-59.

In an effort to avoid such poor returns, an experiment was begun in 1929 whereby the Irving Trust Company of New York City was made sole or standing receiver in bankruptcy cases in the Southern District of New York. During the period June 30, 1929, to June 30, 1933, the Irving Trust Company handled 2,604 cases; cases handled by others in the same district totaled 8,985 and, in the entire United States, 308,442. The following summary compares the results of this specialized management with the, ordinary liquidations:

Conductor of Cases	*No. of Cases Conducted*	*Fees and Expenses as Percentage of Realized Assets*	*Paid to All Classes*	*Paid on Unsecured Claims*
Irving Trust Company	2,604	20.7%	77.0%	10.1%
Others:				
In same district	8,985	34.5	60.1	10.3
In entire United States	308,442	21.6	75.3	10.8

Source: Starkweather and Valenta, *op. cit.*

A small business that is suffering operating losses may continue operations and avoid liquidation because the controlling stockholders make their livelihood from their jobs in the business and they prefer to live on their principal, if necessary, rather than face the fact of failure and the need for change. Large corporations may continue to operate at a loss because the management, with which the initiative rests, has a primary interest in the continuance of its own salaries and only a small interest in the value of the stockholders' investment. In any business where a large part of the assets are fixed and the amount likely to be salvaged by liquidation is relatively small, the end will be deferred as long as possible. When the value of the business as a going concern, on the basis of expected earnings, fails to equal the amount that can be realized by dissolution, then voluntary liquidation should be started.

In view of the losses that are inevitable when a business is broken up, informed creditors will do all they can to keep it alive, compromising claims on occasion. When liquidation is necessary, they should cooperate to minimize the all-too-common wastes of bankruptcy.

CHAPTER 30

SOCIAL ASPECTS OF CORPORATION FINANCE

Finance and Economics

Economics of finance. While a full discussion of all of the many and complex social problems that grow out of our subject matter is obviously impossible, some of the more important should at least be indicated. The problems are those which involve the social point of view—the field of political economy, which concerns the student of the "wealth of nations" as distinguished from the profit of the individual. Some of these, such as the ones connected with promotion, investment banking, and the operation of the security exchanges, have been touched upon in the discussions of the appropriate topics.

It is conventional to say that our subject deals with the third factor of production—capital.[1] Business finance deals with the raising of "capital" used for private business purposes and the broader aspects of its administration. Because "capital" is limited and scarce, as is the case with the two other factors, land and labor, those who own it are able to obtain a price for its use. This price is called "economic interest." Interest as a price is subject to the usual influences of supply and demand.

Various theories have been advanced to explain interest.[2] "Productivity" theories emphasize the reasons for the demand for capital. Thus, the roundabout methods of capitalistic production, which use machinery instead of simple handwork, make a given amount of labor more productive of goods and services. The extra product is attributed to the "capital" factor. It has also been pointed out that capital invested in animals and crops increases in amount, and so presumably in value, by the act of nature, so that, as long as opportunities exist for savings to take such forms of investment, they can be productive. We also know that some durable

[1] See pp. 81-83 for a more careful distinction between economic and business capital.

[2] Standard textbooks on principles of economics may be consulted for the economist's discussion of these theories. For an extended discussion, see Gustav Cassel, *The Nature and Necessity of Interest* (London: The Macmillan Co., 1903), and Irving Fisher, *The Theory of Interest* (New York: The Macmillan Co., 1930).

goods, like houses, are productive of services that have direct utility for consumers. Whatever the form "productivity" takes, it furnishes the basis for ability to pay interest.

Other theories of interest have stressed the supply factor, or the savings side of the picture. Scarcity is necessary or the price will tend to fall to zero. The preference most men have for spending in the present rather than the future can be traced to our common mortality and to the vague uncertainty of future enjoyments as against the vivid certainty of the present. This contrast is most marked for the poor, whose wants rarely reach the point of satiety that makes for a judicious appraisal of future desires. The time-preference scale will vary among individuals, as between the grasshopper and the ant in the fable. Such differences will explain why some will save and lend, while others will be willing to pay interest for loans to finance consumption.

The mental pain of "abstinence" from present consumption has also been advanced as a theory of the economic cost of saving. However, for savers who are keenly aware of probable future needs —for example, the need for retirement in old age—the preference may be for future over present spending, so that they would be willing to go without interest or even suffer a negative rate of interest if they are sufficiently confident that their savings will give them the desired future buying power.

In practice, the savings of investors are not automatically converted into productive goods but move indirectly through the channel of stocks, bonds, mortgages, and various investment institutions. While a sale of corporation bonds or stocks may result in additions to the productive equipment of the business, it may merely represent a sale of capitalized goodwill or possibly the capitalized earnings of a monopoly position or of land. A sale of government bonds may represent an addition to the producers' goods of a country, in the form of a power dam or a railroad system, but generally it represents either durable consumption goods, such as school buildings, or an outright consumption expenditure, such as war spending or extraordinary relief. The third major field of investment, real estate, represents land and improvements, the latter consisting chiefly of buildings on the land.

A peculiarity of the "capital" markets is that a major part of the buying and selling represents transfers of already-existing property and only a secondary part represents new financing for the creation of new capital goods. Unlike the market for most goods and services, the market for "capital," or property instruments, is distinctly a market for "secondhand" rather than "new" merchandise. A major part of the demand for funds in this market, then, comes from the "de-saving process" of those desirous of recovering

principal as compared with the offering of new issues by corporations and governments and the occasional contraction of the volume of credit by the banking system during a deflationary period. The supply of funds for this market comes not only from savings, which includes savings by governments and corporations as well as by individuals, but also during certain periods from the expansion of the volume of bank credit not represented by savings deposits.

Let us take up first some of the problems in the operation of this market mechanism—the stock exchanges, investment banking, voting and control of the big corporation, and the general place of regulation. Then we shall turn to some of the more fundamental criticisms of our present financial machinery: the inadequacies of private finance institutions, the encouragement they offer to mere size and so to monopoly, the place of Government agencies in private finance, and the troubles that arise from the use of debt.

Social interest in security markets. The economic aspects of the market for securities have already been discussed in the chapters devoted to investment banking (Chapter 14) and the organized security exchanges (Chapter 15). The reforms sought in the operation of the exchanges, where "secondhand" securities are traded, have been devoted largely to improving their quality as markets. The characteristics of a good market of the organized type include (a) the prevention of manipulation, (b) publicity and rapid dissemination of prices, (c) the prevention of practices that would place the interest of exchange members in conflict with that of principals whom they represent as agents, and (d) in the absence of standardization of the product (such as is possible in the case of commodities), the requirement of not merely truthful information but full disclosure of material information that may aid in the more accurate evaluation of the property traded in. Federal legislation and the Securities and Exchange Commission have brought to fruition the work initiated and developed by the New York Stock Exchange on a voluntary basis. While the Exchange had an interest in establishing and maintaining public confidence in its operations and listings, it lacked much of the power necessary to enforce salutary measures, especially when the activities of nonmembers were involved. The Commission, however, clothed with governmental authority, has the power not only to forbid but also to penalize undesirable practices. Its problem is to provide a policing service without throttling operations that are socially useful.

In the marketing of new issues, in which the investment banker plays a leading role, the function of regulation might appear to be substantially the same as for the exchange. However, differences arise just as they would between any organized market with a con-

trolled membership subject to effective self-discipline and an unorganized community of competing merchants. Not only is effective self-control lacking, but the independent merchant, unlike the broker, is a principal whose profit may be made at the expense of a poorly informed, or even a misinformed, customer. No trade association is likely to be able to police the unskillful or fraudulent fringe of its business as effectively as an exchange can, for the exchange has the power to punish by expulsion any members who indulge in practices likely to bring the group into disrepute.

For this reason the registration provisions of the Securities and Exchange Commission governing new security issues have appeared as the most notable change in the practice of marketing securities. The chief danger in this type of reform is that a possible excess of regulatory zeal may make financing costs prohibitive for smaller corporations, which have a legitimate place in the public market. Such concerns, as stated before, are handicapped in any case in the use of investment banking channels by the smaller size of their offerings. Too heavy costs in meeting registration requirements may be the final straw in making such financing impractical.

The general philosophy of regulation should be noted in this connection. Its function is not ordinarily regarded as the prevention of unwise investments but rather as the assurance of adequate and full information. Only financing of a fraudulent nature falls under the clear ban of the law. The customary assumption is that adequate disclosure will enable the investor or speculator to reach his own decision. In practice, however, a powerful body like the Securities and Exchange Commission can prevent many issues that are deemed of very doubtful character from reaching the public by burdening the particular registrants with delays and costs and by an insistence upon a very full statement of factors that are likely to make for a poor sale of the issue, such as the previous records of the promoters, profits that promoters are making in the sale of assets to the corporation or in taking a lion's share of the securities for services, details of poor earnings or weak financial condition, and methods of valuation of assets.

The right and obligation of the Government to regulate arose when a considerable number of corporations ceased to rely upon those intimately connected with the operations of the business and appealed to the general public for funds. A badly functioning market works not only individual hardships but also gives rise to social ills. These dangers are suggested in the preamble to the Securities Exchange Act of 1934, which points out how operations in the security markets affect the financing of trade and industry; how prices established form the basis for large transfers of prop-

erty, the calculation of taxes, and the establishment of collateral values for bank loans; and that manipulative fluctuations give rise to undesirable speculation, intensify and prolong national economic emergencies, and place a burden on the national credit which is used to meet such emergencies.

However, there is a large middle ground between downright fraud and conservative investment. This is the field of hazardous investment, or speculation. The social philosopher finds more difficulty in reaching a conclusion as to the exact place of regulation in this necessarily risky field than in that of the conservative institutions dedicated to public thrift, such as the life insurance company, the savings bank, and the savings and loan association, which it is admitted should be closely regulated and supervised. In this brief space, only an outline of the argument between the extreme regulationist group and the extreme freedom-of-investment group can be stated.

On the one side are those who emphasize the inability of persons with only small amounts for investment either to bear losses or to diversify their holdings sufficiently to average losses against gains. They also point out the comparative inability of the less wealthy group as a class to judge the risks they are assuming The statistical odds against the small investor who attempts to invest in second-grade and speculative commitments are probably great, although no precise evidence is available on this point or on the extent to which the small investor puts his savings in such channels instead of in the more conservative, thrift institutions which are most fitting for those needing safety.

Opposed to this point of view are those who believe that the individual should be allowed to lose his money in hazardous commitments if that is his choice, provided only that he be given the protection of full and truthful information. In a country that has rejected Prohibition and has actually legalized gambling in many states, paternalism that would define the individual's field of investment is difficult to rationalize, at least beyond the point of requiring full disclosure and of punishing fraud. More complete information on real estate bonds and foreign government bonds during the 1920's would probably have reduced some of the losses in those fields, although the influence of mass enthusiasm in boom periods has been known to engulf judgment. That regulation is no panacea for investment ills may be seen in the severe losses in the closely regulated railroad field, in which a third of the industry is insolvent. Regulation itself must be entrusted to individuals, and the prescience of individuals is not increased by their elevation to a governmental office.

Although admittedly wasteful, the process of free investment has provided the funds for the economic pioneering and experimentation that has brought about the most remarkable advances in the application of inventions to our present-day living. Aside from the question of whether similar progress could have been made by governmental initiative, there is a strong probability that it might have been equally wasteful, since a governmental body would not have had the same direct motivation to economy as those who were risking personal funds. Today an increased part of invention and progress is developing in the laboratories and commercial research activities of large corporations and universities. Major developments continue, however, to spring from the work of the individual inventor and the small business unit.

Like a lottery, speculative commitments provide a few grand prizes and many small ones; unlike gambling, speculation assumes risks that are inherent in our economic system and must be borne by someone in providing funds for the conduct of business in a competitive capitalistic society. Moreover, loss for the gamblers as a group is an inherent part of a lottery but not of speculation, in which loss depends upon the average of intelligence and skill and the sweep of external economic forces. A serious defect in our social organization is the failure to provide a common education in the rudiments of investment and business practice. Such a lack is important in a society in which the common man has for the first time the means to invest and a freedom of choice that requires a knowledge that most are obliged to acquire by experience.

Need for marketability. Since the function of the marketing machinery is to provide marketability, the question arises as to the social importance of that characteristic as distinct from the advantages it possesses for the individual investor. For ordinary goods and services, the significance of the market is more obvious. The market is necessary in order to permit the easy exchange which is the basis for a society that wishes to enjoy the advantages flowing from the division of labor. The better the market, the more likely is a free movement of goods that will make for the most efficient utilization of labor and resources. The same idea applies for the initial movement of savings into their employment. But, once the savings have been invested, the reason for a good market is somewhat less apparent from the social point of view. The need can most easily be understood by going back to the social function of thrift.

Society has a dual interest in saving and investment. On the one hand, the process is the means of supplying the funds for the capital that the community needs. Whatever makes the practice

attractive lowers the social cost of supplying this factor of production. On the other hand, those individuals who help themselves by thrift through personal emergencies and old age are relieving the agencies of public relief—at least in those countries which have come to recognize a responsibility for the care of the indigent and aged.

The most important reason for marketability is that it is one of the major attractions to investment and therefore is one of the strongest incentives to saving. The willingness of investors to accept a lower return upon those investments from which they are able to recover their principal readily is commonly recognized. Whenever the purpose of saving is deferred spending rather than the acquisition of a permanent income, the ability to recover principal will be important. Marketability will also induce speculators to assume risks they might otherwise avoid, because they know they will be able to limit their losses through resale after value has declined, whereas an unmarketable commitment might hold the risk of a total loss.

Appeals for funds by both old and new enterprises are also more readily cared for in a market in which investments are fluid. If the new issues do not appeal to the particular persons who are saving at that moment, they may appeal to those who have saved in the past and now hold other issues. The old issues are sold, and the new ones find a market. While this process does not necessarily add to the volume of savings (though it may, by widening the range of investment choices) , it does increase the ability of the market to care for all kinds of new and varying demands.

Marketability of corporate securities in convenient denomination also makes a diffusion of property ownership easier. The remarkable increase in the stockholder lists of large corporations since the first World War, while not affording exact evidence as to the number of stockholders (because a given stockholder may hold stock in a number of these corporations) points in the direction of a greatly increased spread of ownership.[3] In the field of bonds the diffusion of ownership has been indirectly achieved through the spread of investment in life insurance companies and banks, which are major holders of the better-grade issues. In the case of banks, one of the requirements for a satisfactory holding has been the marketability feature.

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[3] See Gardiner C. Means, "The Diffusion of Stock Ownership in the United States," *Quarterly Journal of Economics,* August, 1930, p. 562. For the most recent data on stock ownership of large corporations, see Securities and Exchange Commission, *Selected Statistics on Securities and on Exchange Markets* (Washington, August, 1939).

Marketability also facilitates the operation of taxes upon inheritance (or any taxes upon "capital"), which have been regarded in many quarters as a desirable means to reduce the concentration of wealth.[4] Such taxes operate with the greatest difficulty and work the most hardship in a community in which property is held in the form of relatively nonliquid landed estates or shares in closely held family corporations. A share in such an estate can be sold only with difficulty in order to pay the tax. Such a tax upon "capital" (as distinguished from a tax upon income) has been criticized on social grounds as reducing the supply of capital. Some economists have pointed out that this effect could be avoided by using all proceeds from such taxes to reduce Government debt. Both individual hardship and social cost are minimized in a state in which savings are constantly flowing into a diversified and fluid central market for investment. The tax itself will be least objectionable when the community is rich in savings and the levy is not heavy enough to discourage necessary savings.

Social Problems

Voting and control. A major problem that has arisen with the growth of large corporations with widely diffused ownership (sometimes called publicly owned) is the matter of their control. Legally, the control rests with the majority of voting stock.' Economic philosophy has been built around the theory that the corporation is actively directed by its risk-taking owners, who would seek to combine capital, labor, and land in the most economical proportions in their efforts to obtain profits.

Thus far the law and regulation have been concerned chiefly with making this legal control as effective and real as possible. The law, as we have seen, makes the proxy responsive to the stockholder's wish and, by providing that it shall be revocable at will prevents it from being made a device to bind him.' In order to make the right to vote by proxy a more effective instrument, the

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A brief discussion of inheritance taxation is found in the article on that subject by William J. Schultz in *Encyclopaedia of the Social Sciences,* Vol. 8, pp. 43-49. For more extensive treatment see the same author's *Taxation of Inheritance* (Boston: Houghton Mifflin Co., 1926), and E. R. Seligman, *Essays in Taxation* (New York: The Macmillan Co., 10th ed., 1925), Chapter V.

The absence of voting power in preferred stocks and classified common, which, in effect, is preferred may be justified by priority that makes representation appear unnecessary. (See pp. 103-104 for protective voting rights.) Nonvoting common shares are to be frowned upon, and the New York Stock Exchange has refused to list such issues since 1933. Since this denial of the voting right is exceptional, it is not discussed here.

See p. 79.

Securities and Exchange Commission has issued regulations (Regulation X-14) that require those soliciting proxies in the case of corporations with securities listed on a national security exchange to provide the stockholder with certain information and file a copy of this "proxy statement" with the Commission. This statement must give the following information:

1. The identity of the persons soliciting the proxy.
2. The nature of matters to be voted upon under the proxy.
3. The power of the security holder to revoke his proxy.
4. The rights of dissenting stockholders.
5. The expenses of proxy solicitation, including all compensation paid to solicitors.

The security holder must be given an opportunity to direct the manner in which his vote shall be cast upon each of the items under consideration at the meeting. He may, however, confer upon the solicitor the right to vote as he pleases. When the proxy is for a meeting at which directors are to be elected, the nominees must be indicated and information must be provided on such points as their relation to the corporation, who was instrumental in their original selection, and their holdings both of record and beneficially. Sometimes certain financial information about the company must be included in the proxy statement.

But the problem is more difficult than a mere matter of providing stockholders with certain formal information. With the diffusion of stock ownership, the majority of stockholders find it as difficult to vote with intelligence in corporate matters as to choose from the long list of public servants for whom they vote in a political election. Many are indifferent in both cases under such conditions. As a result, those in control of a corporation often become a self-perpetuating body that nominates and fills its own vacancies.

While generalization is difficult, the election of corporate directors usually brings in the following four types of person.[7] Elections based upon nepotism or the "dummy" type are ignored here, since they are likely to grow out of the first or second groups.

1. *Large stockholding interests.* Parties with a large stock interest, even though they lack majority control, are often given representation on the board in the larger publicly owned corporations. No individual or even group is likely to own more than a substantial minority interest in such companies.. Very often a substantial minority bloc of stock will give its holders working

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Some states, like Delaware and Illinois, do not require that directors own stock. Since the amount of investment required by many states to acquire the necessary "qualifying" shares may be nominal, the requirement of stock ownership has lost much of its significance.

control of the board.[8] Even where the board represents an actual majority, minority representation has the virtue of providing a check upon the majority, which might exploit its position through such devices as high executive salaries or favorable contracts to special interests. In this way minority representation may serve as protection for the rank and file of small stockholders, whose interests are similar.

Cumulative voting has the advantage of insuring proportional representation for substantial minority blocs (see p. 65) instead of making them dependent upon the tolerance of the controlling majority. With the varied representation on the board of directors that may grow out of this system of voting, harmony may be lessened, but there will be the advantages of the checks and balances which usually go with democratic representation and the give and take of different points of view of a representative government. Some institutional stockholders of a fiduciary character refuse directorial representation in order to avoid possible criticism and to preserve a judicious attitude that will permit them to sell any holdings without qualms. Since the social virtue of private capitalism depends in large part upon its giving efficient direction and employment to the several factors of production, the desirability of making the board of directors genuinely representative of the stockholder interest should be apparent.

2. Management interests. Even though the more important policy-making officers are not substantial stockholders, they quite generally have a place on the board. This position gives the management an opportunity to clarify operating policies to the directors as the occasion demands and should insure a closer cooperation between the board and the management. The danger of too considerable representation upon the board is the possibility that the board may become a mere rubber stamp and fail to represent the stockholders' interests when they conflict with the personal interests of the executive officers. The stockholders' interest is most distinct and often divergent in the large corporation, in contrast with the small close corporation, so that there is a greater need for an independent board in the publicly owned corporation.

3. Associated business interests. Probably the most prominent example of this type of selection has been found in the commercial banking field. Frequently a bank includes among its directors

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That stockholders who own a large part of the stock may be unable to wrest control from a strongly entrenched management that has a small stock interest but is able to obtain proxies is illustrated in the Tide Water Associated Oil Company proxy battle in May, 1938. Following an unsuccessful effort to have proxies representing almost half of the shares present declared invalid, the J. Paul Getty interests (Mission Oil Co.), which owned 24 per cent of the outstanding stock, withdrew from the annual meeting. *New York Times,* May 6, 1938, p. 34.

men who represent business concerns that are likely to be associated with the bank as important customers, or who possess a knowledge of certain fields of business that would be useful in guiding bank policy and in passing on loans to particular industries. Industrial corporations have often elected prominent executives from non-competitive lines because their business experience and prestige were felt to be helpful. Recently some important companies have reduced the number of directors with a financial type of background and have elected businessmen from the territory served.[9]

4. *Banking interests.* The pros and cons of investment banker representation on the board have been discussed earlier (see pp. 326-328). From the stockholders' viewpoint the disadvantage of banker control lies in a possible divergence of interest. A banker is likely to be concerned primarily with the profits of security flotations or with the interests of the holders of the prior securities that have been sold by his house. Banker representation, as distinguished from banker control, may have considerable value in that it may bring additional skill to the shaping of financial policies and sometimes may temper the enthusiasms of the operating executives with a conservatism that is of service to all in the long run.

Promoter representation, whether promotion was by an individual or by a banking group, is ordinarily obtained through the ownership of a controlling bloc of stock and so falls under the first heading above. In so far as such control is open to criticism, the criticism concerns the plan of promotion rather than stockholder representation as such.

Nonstockholder representation. In the large publicly owned corporation the problem has grown beyond that of obtaining adequate representation for stockholders. When the size or some other factor has given such corporations some relief from the pressure of competitive forces, the consumer and labor groups may have lost some of their protection and become more dependent upon the statesmanship of corporate direction. The very diffusion of ownership that has accompanied the growth of these companies has made them less subject to stockholder pressure. This development explains the statement of Lewis Brown, President of Johns-Manville Corporation, before the International Management Conference in September, 1938:

> In the complex industrial society under which we now live management no longer represents, as formerly, a *single interest;* increasingly it functions on the basis of a trusteeship, endeavoring to maintain a proper balance of equity between four basic interlocking groups: the stockholders .. . the job holders . . . the customers . . . the public. . . .

[9] Examples of this type of change may be found in the Illinois Central Railroad board (see *New York Times,* May 19, 1938, p. 31) ; the General Motors Corporation board *(ibid.,* May 4, 1937) ; and the United States Steel Corporation board *(ibid.,* December 10, 1937).

With respect to the labor group it can be argued that its position is one of priority, somewhat like that of the bondholders, and for that reason it is in less need of representation. Labor even has priority over the bondholders in that its wages must be paid as one of the operating expenses before the balance from which bond interest can be paid is arrived at. Bondholders become most keenly aware of this priority when their corporation becomes insolvent and is operated by a receiver or trustee. At such times, labor must continue to be paid if operations are not to cease entirely, while interest typically goes unpaid. In the case of financially embarrassed public service corporations, labor has sometimes continued to work and to collect wages while even taxes were allowed to go unpaid. The chief advantage of the bondholder's position is that his claim must be met if the corporation is to avoid admitted bankruptcy, even though the funds supplied are no longer employed profitably, whereas idle laborers can be laid off. Consequently, unearned interest may be paid at times, but obviously this cannot be done for any length of time. Since wages are a larger cost factor than interest, any attempt to pay idle labor would exhaust working capital even more quickly and lead to the complete stoppage of operations.

Labor also has the advantage of being able to speak for itself when it is organized into unions, and unions may extract much or all of the benefits which an industry derives from a monopoly position. It is significant that the strongest unions have developed in those lines of business in which labor is best paid, and the greatest difficulty in organizing unions is found in the more competitive and poorly paid industries. Labor's stake in the successful business, then, lies not only in the need for continued business activity to provide employment; the wage level itself may be affected by the skill of management and the profitableness of operations. The argument that labor has no investment should be tempered by practical recognition of the very considerable intangible investment which labor has in any successful industry in the form of the capitalized value of the extra earning power that it derives from special skills—skills which could not be used elsewhere if employment ceased or even if operations became less profitable. While outright control by labor might have the disadvantage of fostering inefficiencies that favored its own position, representation might well have the advantage of making clearer to labor the problems of industry and a recognition of common interests.

The consumer group is virtually unorganized, and the protection of its interests has been left very largely to competitive forces, except for the regulation of public utilities, governmental action in such matters as pure-food legislation, and requirements with respect to labeling and truthful advertising. As a result, the con-

sumer's interest has suffered from the attacks of special group interests in such matters as anti—chain store legislation, tariffs, and legislation permitting price fixing In general, the interests of special groups seeking personal advantage, whether in the form of corporate profits, high wage scales, or more ample funds for tax-supported groups, are more effectively organized and implemented than the broader interest of the consumer. The management of a large corporation is more likely than that of a small corporation to be faced with the problem of harmonizing conflicting interests. Economic statesmanship would call for a larger recognition of the importance of conserving public and consumer group interests. In the early stages of a new business enterprise the logical course may well be to seize any available high profits in order to furnish the funds and growth that cannot readily be obtained elsewhere. The skimming of the high-priced market by a young industry is a common method for covering the initial high marketing costs and the larger production costs that go with small output. Later, when the industry has achieved stature and has reached the stage of a publicly owned company, the passing along of savings to the consumer group in the form of reduced prices, instead of the payment of superprofits to capital or superwages to labor, not only has social logic but also has the business virtue of minimizing an overexpansion of competition and retaining the economies of large-scale production.[10] To establish and to attempt to retain uneconomically high profits or wage scales may create later troubles and disappointments for both investors and labor when competitive factors become more effective.

The post of "professional director" has been advocated in some quarters.[11] While presumably election would rest with the same persons who elect present directors, the central idea appears to be the choice of a salaried person who will have more time to study the problems that should concern directors and will bring to bear a more thorough knowledge of conditions to serve as a check upon management. The independent point of view of the board would be reinforced by fuller knowledge. The practice would have some of the same virtues of the independent audit made directly to stockholders. The idea takes into account the necessary shortcomings

[10] The social implications of the failure of industry to share with the consumer the benefits and savings of increased productivity are set forth in H. G. Moulton, *The Formation of Capital* (Washington: The Brookings Institution, 1935), Chapters IV, V, X, and XI, and *Income and Economic Progress* (Washington: The Brookings Institution, 1935), Chapters VII and VIII; see also Frederick C. Mills, *Prices in Recession and Recovery* (New York: National Bureau of Economic Research, Inc., 1936), Chapter IX.

[11] See W. 0. Douglas' advocacy of salaried corporate directors, *Commercial and Financial Chronicle,* January 14, 1939, p. 216.

of any scheme of public regulation. The sorry record of the railroads is suggestive of the inadequacy of regulation to solve the problems of an industry.

In the absence of "professional" directors or regulation, the publicly owned corporation has to rely on existing factors to make it an effective instrument of production. These are (a) stockholder pressure, (b) the desire of management to make a satisfactory record in comparison with other similar corporations, (c) the hazard to inefficient management that it will be eliminated by the directors, (d) the danger that, if the directors fail to make the elimination, and the company's lack of success results in extreme decline of stock prices, working control may be acquired by a group desirous of making capital profits out of new management and improved profits, and (e) competitive pressure, which tends to keep prices reasonable and forces a business concern to keep pace with the improving efficiency in its field.

Availability of 'bank credit. A major criticism of our system of financing has been that it fails to pipe funds into certain quarters in which the need is acute and legitimate. One such criticism of the commercial banking system resulted in a survey by the Treasury Department.[12] While no clearcut results critical of the commercial banks were obtained, certain difficulties in securing credit were apparent. In the first place, the depression period, during which the study was made, had undoubtedly made banks more careful in the extension of credit, and, as a result, businesses with weaker credit felt the pinch. In many cases concerns had in previous years undoubtedly received credit that the strict application of the rules for a short-term liquid loan, usually regarded as the ideal for commercial banking, would have prevented. However, loans for more than seasonal purposes may well' have a legitimate place in the commercial banking portfolio. This view is supported by the development of the term loan, which was discussed earlier (p. 472), although it must be admitted that such loans are still regarded by some bankers as experimental. It should be recognized that many would-be bank borrowers were and are rejected, however, because they have too small an ownership equity in the business, so that the bank would be assuming an excessive degree of risk.

A second factor that made for credit stringency was the stricter standards of bank examination which grew out of depression troubles and made it dangerous to a bank's solvency to extend loans that might be slow in payment. Unless the bank was unusu-

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Report on the Availability of Bank Credit in the Seventh Federal Reserve District (Washington, 1935). See also National Industrial Conference Board, Inc., *The Availability of Bank Credit* (New York: The Board, 1932).

ally well protected by a large surplus, it could not take the risk of having to write off substantial amounts that bank examiners deemed slow or doubtful, even though the banker might feel certain in his own mind that the loan would be paid ultimately because of his knowledge of the chardcter and record of the borrower. That standards may have grown unduly stringent during this period is indicated by the subsequent modification of bank examination rules.[13]

A third factor affecting credit extension is suggested in the preceding paragraph—namely, an inadequate cushion of surplus to absorb even a reasonable degree of banking risk. Aside from the fact that the losses of the early 1930's reduced commercial banking surpluses to a very grave degree, it must be recognized that commercial banks are not in a position to assume more than a very small amount of risk. The great bulk of their funds comes from depositors, to whom they have a definite dollar liability. The failure of assets to cover this liability means insolvency. Any substantial shrinkage of bank deposits brought about by bank failures has more serious social consequences than a failure of other types of credit, because bank deposits are our chief medium of exchange. Since the total stockholders' investment in the typical commercial bank runs only from 10 to 20 per cent of the deposit liabilities, the asset shrinkage that a bank can stand is obviously limited.

A fourth factor limiting the credit service of- commercial banks is found in our unit banking system. Small local banks are limited as to the amount they can lend not only by law but also by their inability to diversify their credit risks. This inability makes their lending ability more limited than that of institutions of similar size that are branches of a single bank covering a large area. Industry and trade are probably more independent of bank credit and more accustomed to depend upon either their own funds or trade credit in this country than in Europe. The limitations of the unit banking system, as compared with a branch banking system, such as prevails abroad, is probably an important explanation of this difference.[14]

Whereas commercial bankers were often accustomed in the past to rely too heavily upon personal reactions and general reputation,

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" For description and text of the revised procedure adopted in the classification of loans and regulation of investments in securities, see *Federal Reserve Bulletin,* July, 1938, pp. 563-566, and *Twenty-fifth Annual Report of the Board of Governors of the Federal Reserve System* (Washington, 1939), pp. 37-38, 89-90.

"Luther A. Harr, *Branch Banking in England* (Philadelphia: University of Pennsylvania Press, 1929), Chapter VI.

there is now the danger of too much emphasis by supervisory authorities upon statistical factors. The very increase of formal educational standards in the banking business may have a. tendency to emphasize routine procedures and give insufficient weight to the element of judgment that should grow from practical experience. No financial formula can take the place of banking judgment that is competent to give proper weight to such intangibles as personal character and business ability, which factors should influence the interpretation of statistical information.

Aside from the genuine obstacles that prevent our banking system from supplying all the legitimate needs of commerce and industry, complaints are to be expected from business concerns that seek credit to which they are not entitled. Such mistaken complaints may arise from a lack of knowledge of reasonable banking standards or from that perennial optimism which tends to make businessmen overappraise the virtues of their own position.

Need for "risk capital." What many of these smaller corporations need, however, is funds of the equity type rather than additional credit. If the funds are obtained in the form of a loan to a high risk situation, the contract should provide for something beyond the conventional interest rate, presumably a share in the profits. The prospect of additional return is essential to cover two items: first, the losses which are certain to occur and, second, the extra costs of investigating and supervising such an investment relation. The actual losses may be negligible in good times but substantial in years of depression for this type of commitment, and adequate reserves are necessary, although those who seek the funds often regard them as constituting an excessive charge.

In years past, when the investment of stockholders bore a more substantial relation to deposit liabilities, commercial banks were in a position to undertake loans of longer-term maturity and greater risk than would be appropriate today. [15] A possible innovation to meet this need for loans that are deemed unsuitable for commercial banks would be a lending and investing organization of the investment trust type employing permanent funds from investors rather than deposits. One Middle Western organization in the investment trust field has indicated its interest in supplying business capital by providing funds for the seasoning of new sound enterprises before stock distribution and for the refinancing of established corporations and by entering into situations by out-

"Comparative ratios of total deposits to net worth, for all national banks, on the last date of call of the year are as follows: 1875-1.2:1; 1885-1.9:1; 1895-2.1:1; 1905-3.4 :1; 1915-4.8 :1; 1925-7.0:1; 1935-8.4:1. *Annual Reports of the Comptroller of the Currency.*

right purchases of stock. This organization would expect the following:

1. Reasonable security for its investment capital.
2. Management that is both able and trustworthy.
   Business that has expansion possibilities.
4. Business that is willing to offer a portion in the equity.
   Some plan for the ultimate disposition of the securities obtained.

The last point would suggest develOpment to the point at which a public offering would be possible.

The advantage to an investment trust of investing its funds in this type of situation over purchasing well-known listed stocks would lie in the following:

1. Expectation of higher return. Since corporations that were in need of funds and used this source would be unable to appeal directly to the public market, they would expect to offer a hope of higher return. A large corporation often shows an extremely low return upon the market price of its listed common stock, so that the only compensation the investor has for the risk he assumes, as compared with that undertaken in buying conservative bonds, lies in the hope of appreciation. Under able management a smaller concern is often able to show a surprisingly high rate of return, which may be a reflection of business ability or opportunity rather than risk.

2. Reinvestment possibilities. One,of the most legitimate bases for expecting appreciation is the hope that the corporation can reinvest its earnings and receive an exceptionally high return on them. Small or medium-sized concerns may provide unusual opportunities for growth of investment by reinvestment at what amounts to a high rate, of compound interest. The very fact that a business is small may mean that it has much greater possibilities of a large percentage growth than any industrial giant.

3. Capital gain from sale of investment. If the business in which investment is being made has the possibility of reaching a size and stage at which an offering of its securities in the public market would be logical, then the investment value of a commit ment may grow in relation to the earnings. Just as the listed stock of large corporations is often capitalized at relatively low rates in, the market, as compared with the stock of lesser listed companies, so the change of a stock from the unlisted to the listed group may increase its market value materially.

Some of the difficulties which the average small business would

be likely to experience in using the facilities of even this specialized type of financial institution are as follows:

1. *Small size.* Small size may bar it from this channel because the business must be able to use an amount that will provide enough extra profits to compensate for the minimum expenses of investigating and then supervising the commitments.
2. *Risk of impermanence.* The risk of impermanence may be excessive because of dependence upon the ability of a single individual. This hazard has probably been overstressed in practice because of a failure to realize the possibility of guarding against it at a small annual cost through life insurance. To justify long-term investment instead of a short-term loan, a business must give promise of continuous existence and a self-perpetuating organization.
3. *Inadequacy of profit possibilities.* The profit or growth possibilities may be too limited to encourage so risky an investment. Many businesses of the ordinary mercantile or manufacturing variety are carried on in order to give their owners relatively good salaries, and they offer little inducement for equity investment by outsiders. Such a concern must depend upon reinvested earnings and whatever relatively short-term credit their stockholders' investment and the type of business will support.

However, the recent growth of the factor and the receivables company (see Chapter 20) suggests that they may play an increasing part in financing businesses that are subject to the handicaps listed above. The high charges of such institutions may be justified partly by comparison with the rate of return which alternative equity financing would require, and partly by the services which go with this type of financing. Actually these organizations do not assume the degree of risk of the typical buyer of common stock, because they use a considerable portion of the income they receive for supervision of the business they finance. This practice keeps their losses at a figure that probably compares favorably with that of many commercial banks. Furthermore, the factor assumes the work of the credit and collection department. Other benefits may be derived from contact between the executives, who are primarily skillful in merchandising or production, and an organization specializing in financial matters. Thus, the charges are not a pure return for borrowed funds but are in considerable part compensation for services. These financial institutions fill the gap between the typical commercial banking credit and the investment banking type of funds. In view of the criticisms made of the inadequacy of our system in this direction, the growth of this type of institution will have a wide interest.

Financial advantage of size. The favor accorded the common stock of large corporations in the investment market in the form of a high price in relation to earnings gives them a financial advantage that may be socially undesirable because it may encourage growth beyond the point of efficiency. The profit possibilities from an increase in the market value of the ownership interest of a group of properties offers a strong temptation to combination and a movement in the direction of monopoly, even when there are no possibilities for an increase in net earnings either through economies or monopoly control of prices. Up to the point that increased size results in efficiency, growth is generally regarded as socially desirable; beyond that point, it may not only levy tribute in the form of monopoly charges but also result in higher costs resulting from unwieldiness.[16]

Business leadership, if it is desirous of avoiding the burdens of more stringent regulation and the ultimate possibility of government ownership, should cooperate with political leadership in preventing monopolistic tendencies, because the check of competitive forces is the only logical alternative for obtaining the protection of the consumer public and the achievement of efficiency in the use of the factors of production. Those business interests that recognize the dangers of an undue concentration of political power should be able to recognize the similar hazards of such a concentration of control in the economic field.

The chief counterbalance to an undue favoring of mere bigness in the investment market can be overcome only by an informed, intelligent recognition of investment merit without respect to size. In this regard, the more skillful investors should be able through research to aid the process of making the market more discriminating. Investment trusts and investment counsel may be helpful factors, although both would be obliged to run counter to the easy-going tendency on the part of the general public to favor well-known names.

While not necessarily pointing toward a decrease in the size of the corporate unit, certain factors have tended to make for a decentralization of plants in many industries. The spread of cheap electric power to smaller communities as a result of giant electrical networks, the development of improved highways and transportation service to lesser cities, and the widespread use of the private automobile, giving labor greater mobility, have helped this decentralizing tendency. In a more decentralized system the smaller

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[16] The question of optimum size is discussed on pp. 553-555; for a classic treatment, see A. S. Dewing, *Financial Policy of Corporations* (New York: Ronald Press Co., 3rd. rev. ed., 1934), Book V, Chapter 2.

corporation not only appears less anomalous but often enjoys certain advantages in the way of flexibility over a regimented group of units subject to distant control. Moreover, the monopoly profits of a highly centralized and wealthy industry might be extracted by powerful, well-organized labor unions, so that the monopoly advantage flows to favored labor groups rather than to the investor group. In a period of changing conditions wage relations under such circumstances are often more rigid and difficult to adjust than the profit margin that represents the return to capital. As a consequence, industries of smaller size, operating in smaller communities and often drawing their labor from agricultural areas, may have a distinct advantage in a period of change. To the extent that such smaller units force necessary price adjustments in periods of economic change they may reduce the state of unbalance between urban and rural conditions.

Government financing. Government assistance in the financing of business has been confined largely in this country to emergency situations. The argument for Government aid during a period of crisis is that the shoring up of private institutions at such a time is not merely a matter of helping private interests but also a means of halting panic and lessening the social losses that arise from prolonged depression. Such aid may be a much smaller burden upon the public purse than the relief costs which the Government might otherwise be obliged to bear.

Governmental financing for business may take any of the following forms: (1) direct lending through a Government-owned financing agency, (2) loans through a Government-sponsored agency that raises most of its funds in the public investment markets, and (3) Government guarantee of private business obligations. The first type is illustrated by the operations of the ably managed Reconstruction Finance Corporation, which until recently obtained its funds from the Federal Treasury. Its loans were made to both business and municipal corporations when private credit was difficult to obtain but the Corporation believed adequate security existed for a reasonably safe loan. Industry in general obtained but few loans from this source; corporations able to command loans were generally able to get satisfactory accommodations from commercial banks. Of the loans made to private business corporations, the great bulk went to commercial banks and to railroads. The common feeling is that business has developed credit facilities that are adequate except perhaps in periods of unusual financial distress. The relatively small amount of loans made to ordinary business concerns by the Reconstruction Finance Corporation and by the Federal Reserve banks under the powers granted during the

octreme depression of the early 1930's would suppoit this point of view:

RECONSTRUCTION FINANCE CORPORATION
LOAN DISBURSEMENTS TO DECEMBER 31, 1938

(in millions)

Banks	$3,268
Municipalities and public agencies	822
Building and loan, mortgage, and insurance companies	658
Railroads	625
Agriculture	1,442
Business	161
	$6,976

Source: Reconstruction Finance Corporation, *Report for the Fourth Quarter of 1938* (Washington, 1939), pp. 44-46.

By the end of 1938, applications for direct industrial loans by the Federal Reserve banks had been approved to the amount of $175,011,000.'[7]

The hazards of using public credit for private purposes were illustrated in our own early history and have engendered such a general suspicion of the practice that in some states there are constitutional prohibitions against it.

Under the second type of arrangement the funds may be supplied largely by private sources without a Government guarantee, but the organization enjoys the sponsorship of the Treasury and sometimes gets a small part of its funds from it. Thus the original capital stock of both the Federal Land banks and the National Mortgage Associations was supplied by the Treasury, but the bulk of funds are intended to come from the sale of bonds to the public. Since the financing of agriculture and housing is not thought of as falling within the field of our subject, such institutions do not require our attention.

In recent years the third type of aid, Government guarantee of private obligations, has been used largely to assist housing and agriculture. Often the guarantee has been made by indirection. Thus the Government has lent its credit through a guarantee to obligations of the Federal Mutual Mortgage Insurance Corporation, which in turn insures mortgages on homes made by private lenders after their acceptance by the Federal Housing Administration. The bonds of the Home Owners' Loan Corporation and the Federal Farm Mortgage Corporation were made attractive by a guarantee of principal and interest by the Federal Government, so that mort-

" *Twenty-Fifth Annual Report of the Board of Governors of the Federal Reserve System* (Washington, 1939), p. 32.

gage lenders would be willing to accept them in exchange for the defaulted obligations of home owners and farm owners, respectively. This transfer of mortgages in distress to a Government-sponsored corporation during the depression of the early 1930's allowed the debtors to rescue their property and meet their obligations in the form of an amortized loan.

Because business depressions are characteristically accompanied by extreme declines in those industries which supply production or "capital" goods, the incentive is strong to use Government credit to revive that sector of business. Housing, the railroads, and the utilities are likely to receive special attention. But, because the facilities of these industries are usually more than adequate to meet the reduced demand of a period of slow business, credit is but little sought. If funds are forced into use by some subsidy device, the danger is that normal recovery will be retarded, partly because of the addition to the already-existing glut of facilities and partly because of the doubts created as to the profitability of further private investment when it is obliged to compete with such subsi dized activity.

Subsidies are most feared in those industries in which the cost of funds is a major part of the cost of the product or service, as in the case of housing and public utilities. The lower cost at which the Government may obtain funds, since it can, place the risk of loss upon the taxpayer, can make a substantial difference in the prices charged, even when the prices are made high enough on the Government projects to cover costs. As a consequence of this advantage and the fact that a Government enterprise need not even consider its costs, businessmen are strongly in favor of having Government activity take the form of the development of noncompetitive public works and spending during depression periods as a counterbalance to poor business. Expenditures for such items as waterworks, flood control, bridges, highways, schools and other public buildings, and reforestation provide public benefits that extend over a period of time and absorb labor, savings, and other national resources that would otherwise go unemployed.

Dangers of debt. Some have blamed a considerable part of our business-cycle problem upon the rigidities created by debt.[18] The shock of business insolvencies that arise from inability to meet debt obligations injures business confidence and prolongs the period of depression. It is also felt that the pressure of debt may cause management to make tardy adjustments in their prices and so delay those changes that are necessary before trade can revive.

[18] See Twentieth Century Fund, Inc., *Debts and Recovery* (New York: The Fund, 1938). For recommendations aimed at debt reduction, see p. 33 of this reference.

Whatever tendency there may be on the part of some to delay price adjustments in the hope of covering interest charges, rent declines between 1929 and 1933 for real estate burdened with debt provide evidence of the lack of debt influence upon price policy when there is no sheltering monopoly. The railroads might be regarded as offering contrary evidence. They represent an industry that has used funded debt to an unusual degree, and their prices have been relatively rigid. An examination of the figures for the railroads, however, shows that roughly a third of the industry has defaulted on its debt in recent years, so that the return to the investor group as a whole shrank more than the return to the other factors of production.

The evidence would point to labor and taxes as much more inelastic elements than the claim of the investor group even in this regulated industry, which has certain monopoly characteristics.

TABLE 42

PERCENTAGE DISTRIBUTION OF TOTAL OPERATING REVENUES, CLASS I RAILWAYS

	1925-1928 average	*1930*	*1931*	*1932*	*1937*	*1938*
Labor (wages & salaries)	43.2%	44.8%	46.9%	46.0%	44.8%	46.5%
Fuel and other materials	25.0	22.8	22.3	21.6	23.5	22.6
Taxes	6.1	6.6	7.3	8.8	7.8	9.5
All other expenses	7.2	9.3	11.0	13.2	9.7	10.9
Return on investment (net railway operating revenue)	18.5	16.5	12.5	10.4	14.2	10.5
	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Source: Bureau of Railway Economics, *Statistics of Railways of Class I, United States, 1936-1938* (Washington: The Bureau, 1939).

In fact, wages are invariably paid as long as the receipts from operations permit, while interest, and especially dividend payments, are met only when a balance is available over and above the operating expenses, of which labor costs are a major element. Under such circumstances society enjoys the services of the capital factor once it has been committed to a fixed investment, even when no payment is being made for its use.

Although a society in which ownership instruments alone were employed and debt was nonexistent would undoubtedly be more flexible in meeting changing economic conditions, two difficulties stand in the way of debt abolition. One is that many savers, particularly those who accumulate for later deferred spending, find their chief inducement to thrift in the relatively high certainty of enjoying a definite future sum rather than in any hope of gain or profit. The huge sums committed to life insurance, to savings deposits, and to savings and loan associations point toward this common attitude. The second difficulty lies in the existence of the above-mentioned savings institutions, which could not function read-

ily without the use of credit instruments of relatively stable price. Probably the diffusion of wealth and the growth of savings among those who are not rich has increased the supply of funds that are distinctly available for debt investment but not for ownership investment.

This fact may at times prevent the ready flow of savings into investment, because the act of converting savings into new production goods depends upon the initiative of those controlling the ownership equity. Therefore savings must be available for a balancing ownership investment, and confidence in the outlook must be present in order to insure the absorption of those savings collected by our chief thrift institutions. Failure of savings to flow into investment, whether in new offerings or in old ones that flow back into the market by the route of "de-saving," means that they will be temporarily idle in the form of dormant bank deposits of the demand type. An investment made in the medium of exchange —that is, in currency or a bank deposit—will be reflected in a slower velocity of . turnover of our money. The investment of a certain amount in this way withdraws that much of the medium of exchange from circulation and tends to depress the general price level and slow up the tempo of business.

At such times the Government may play a valuable part in restoring this tempo by borrowing the idle funds (provided that it can do so without impairing its own credit) and using them for purposes likely to be productive of services of a fairly permanent sort. The danger of Government spending of borrowed funds lies in the possibility that the process may impair business confidence and so retard normal business recovery. In measuring the ability of the community to bear domestic debt, both private and governmental, two factors should be kept in mind in order to avoid an alarmist attitude. The first is that the burden should be measured in terms of the debt charges—that is, interest and amortization—rather than by the principal amount. The second is that the cost of the debt should be measured against the productivity of the employment to which the funds are put. As savings accumulate in a wealthy society, the average cost of funds tends to decline, so that much larger amounts can be borrowed for a given annual interest charge. Furthermore, as the interest rates decline, the tendency should be to expand the use of more expensive and more permanent forms of capital goods. The community will build concrete instead of gravel highways; the individual will use stone, brick, and steel instead of wood and other less durable material in his home. As these longer-lived goods are purchased, the annual amortization can be reduced, provided that the risk of obsolescence is not too great. With lowered interest costs and longer-lived capital goods, the principal amount of debt that may be safely

assumed will grow. When the savings are economically employed and make for greater production of wealth, the resulting wealthier society will be able to pay a larger share of its annual income to those who have invested their funds and at the same time provide the other factors of production with a larger income.

The uses to which this income from capital are put will depend upon its distribution and the attitudes of the community. It may be reinvested in more capital goods (particularly if the property is concentrated in the hands of the first generation to accumulate) ; it may be used to support a luxurious standard of living for a wealthy class (most common for the generations which inherit) it may provide for old-age retirement for large numbers (as through annuities) ; or it may go for the expansion of endowed educational and charitable institutions.

The two major fields of private finance that utilize savings—namely, business finance and real estate finance—provide an interesting contrast. No great private housing corporations have grown up to finance housing after the fashion of business. As a result the equities in real estate property are not available in the readily marketable form of the stocks of large business corporations. Promotion and construction in real estate are also handled on a small scale and still employ a high proportion of hand labor. Innovations and lower costs that might result either from larger-scale production or improved methods and materials are strongly opposed by the well-entrenched building trade unions in the large cities.

The mechanism for the investment of scattered savings in both business corporations and real estate has reached its most effective form in life insurance companies, commercial and savings banks, and savings and loan associations. These institutions facilitate the collection of small sums for employment in a variety of situations, spreading risk and providing management. Such institutions are indispensable if the ownership of property is to be widely diffused among a great many people of moderate means instead of among a few wealthy people. The widespread ownership of stocks did not arise in this country until the 1920's, and it is significant that the investment trust, which acts as an intermediary for the small investor, did not grow to any importance until the latter part of that decade. In spite of the abuses of this institution, its further development would appear logical not only for stock equities but also for the ownership of real estate, which up to the present time lacks the marketable quality of corporation securities.

Conclusions

This brief summary of some of the more important economic and social problems that attend business finance can hardly do more

than suggest their general nature. The purpose of this chapter will have been served, however, if the need for statesmanship in the handling of the financial problems of our great publicly owned corporations has been made evident. Those who direct the fortunes of these economic empires must recognize their position of trusteeship and take account of the interest of both labor and the public as well as of the particular class of investors who have the franchise at the annual meeting.

While our business system is generally thought of as one of private competitive capitalism, it would be difficult to find a country in which a greater variety of approaches can be found. Organizations range from corporations with outright Government ownership through those that are privately owned but publicly regulated to those that are strictly private both in operation and in ownership. We have had experience with various degrees of Government guarantee and subsidy. Various forms of cooperative enterprise, such as producers' and consumers' cooperatives, have been used. This eclecticism should provide room for valuable experimentation and the shedding of some light, as well as for debate, with its customary emotional heat.

Certain faults are commonly attributed to business as it operates in its present form, which is so largely dominated by corporate organizations. It is criticized for its lack of responsiveness to "democratic" control, for the encouragement which it gives to mere size, for its monopolistic tendency, for the manner in which it favors the employment of debt, and for its competitive planlessness. How far these conditions are faults and how far they are efficient devices to harness human tendencies for social ends is a subject for disagreement. The very fact of variety and open disagreement is regarded as a matter for congratulation among those who are willing to pay something for the range of choices which is called freedom. Many of the more apparent inadequacies and faults of the system, of which corporation finance is a part, are equally characteristic of political forms in a country that attempts a representative or a republican form of government and submits to the trials of competitive party politics. Both work very largely in proportion to the intelligence, the goodwill, and the adequacy of experience of those in the seats of power.

SELECTED REFERENCE LIST

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This selection of references is not intended as a formal bibliography but to provide (a) the advanced student with supplementary reading, (b) the instructor with material valuable for background and lecture notes, and (c) the practitioner with sources of possible utility in the solution of problems. Additional references are found in the footnotes throughout the volume.

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