

Choosing Pension Fund Investment Consultants*

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March 2023

Abstract

Pension funds rely on the advisory services of investment consultants for designing target asset allocation policy, monitoring and selecting investment managers, and benchmarking performance. Pension funds have increased the number of investment consultants over time, particularly by hiring specialized consultants in alternative assets, such as real assets, private equity and hedge funds. We explore the factors underlying the hiring and firing of consultants and examine whether these decisions are made in the best interests of participants. We examine three potential motivations of why pension funds rely on investment consultants: (a) poor investment expertise; (b) limited access to asset managers; and (c) responsibility shifting. In contrast with the poor investment expertise hypothesis, we find that pension funds that hire specialized investment consultants for the first time already made investments in that asset class. In line with the limited access hypothesis, we find that pension funds that hire specialized investment consultants are more likely to invest in oversubscribed private equity funds and less likely to invest in first-time funds without track record. However, using a specialized consultant does not improve pension fund performance in private markets. In line the responsibility shifting hypothesis, we find that large pension funds with political board members hire more investment consultants. While we find that the turnover of consultants is strongly linked to past performance, there is only weak evidence that performance improves subsequent to a consultant replacement and that pension fund benefit from the increased the number of investment consultants over time.

JEL classification: G11, G23.

Keywords: pension funds, investment consultants, intermediation, asset allocation.

*Andonov: a.andonov@uva.nl; Bonetti: m.bonetti@dnb.nl; Stefanescu: irina.stefanescu@frb.gov. We thank Danjun Xu for excellent research assistance. We thank Juliane Begenau, Amit Goyal, Joshua Rauh, and Philip Valta, and seminar, workshop, and conference participants at the IFABS Conference, Lausanne Private Markets Research Conference, and University of Amsterdam for helpful comments and discussions. We also thank the Kroner Center for Financial Research (KCFR) Academic Advisory Council for feedback and research support. The views expressed in this paper are those of the authors and do not reflect the views of the Board of Governors of the Federal Reserve System, De Nederlandsche Bank, or the Eurosystem.

1 Introduction

Financial advisors and consultants are important intermediaries in the asset management industry, connecting investors to investment products and portfolio managers. Individual investors as well as institutional investors rely on their advice when making investment decisions and evaluating financial products (Inderst and Ottaviani, 2012; Gennaioli, Shleifer, and Vishny, 2015; Spatt, 2020). Collectively, investment consultants advise almost \$17 trillion of public and private retirement assets.¹ Most pension funds seek advice from investment consultants on their asset allocation policy, selection of asset managers, and performance monitoring. Their recommendations affect flows to asset managers, but they appear to have little effect on pension funds' future performance (e.g., Goyal and Wahal, 2008; Jenkinson, Jones, and Martinez, 2016; Goyal, Wahal, and Yavuz, 2021). Notwithstanding this evidence, pension funds have continuously increased the number of consultants over time, particularly in alternative assets, such as real assets, private equity and hedge funds.

Given the growing importance of pension fund - consultant relationships, there is little evidence about how pension funds establish or terminate these connections. Prior research has focused on whether existing consultants have an impact on the allocation policy and performance, at the intensive margin (Jenkinson, Jones, and Martinez, 2016; Jones and Martinez, 2017; Andonov and Rauh, 2022; Begenau, Liang, and Siriwardane, 2022). We focus instead on the extensive margin and directly ask why pension funds rely on investment consultants in the first place, what are the factors driving the hiring and firing of investment consultants, and whether these decisions have any impact on the pension fund performance. Our paper aims to investigate whether this layer of intermediation introduces inefficiencies that later propagate into sub-optimal asset allocation and managers choices.

Pension funds rely on investment consultants for several potential reasons. First, investment consultants are specialized financial intermediaries that could possess higher expertise and informational

¹Total assets at the end of June 2021 from the Pensions & Investments Data Center.

advantages (Allen, 2001; Gârleanu and Pedersen, 2018). In contrast, pension funds are governed by boards with limited expertise in asset management (Andonov, Hochberg, and Rauh, 2018) and have significant compensation constraints to attract talented internal investment managers (Dyck, Manoel, and Morse, 2022). Thus, investment consultants could help pension funds make better allocation decisions, select trustworthy managers, or negotiate favorable fee structures (Gennaioli, Shleifer, and Vishny, 2015; Begenau and Siriwardane, 2022). In this respect, investment consultants may also appear as a cost-efficient alternative, as they spread their costs for advisory, evaluation, and monitoring services across multiple clients.

Second, investment consultants can serve as powerful gatekeepers to certain investments products and asset managers. Networks and connections in the asset management industry can create value for the clients (e.g., Cohen, Frazzini, and Malloy, 2008; Hochberg, Ljungqvist, and Lu, 2010; Rossi, Blake, Timmermann, Tonks, and Wermers, 2018), and pension funds may hire consultants to gain access to their already well-established network of relationships with asset managers. The rationed access to top-performing managers is particularly relevant in alternative assets, such as buyout and venture capital funds (Lerner, Schoar, and Wongsunwai, 2007; Sensoy, Wang, and Weisbach, 2014; Goyal, Wahal, and Yavuz, 2022).

Third, pension funds boards may hire investment consultants to shift responsibility, in face of high public scrutiny in the event of poor performance (Lakonishok, Shleifer, and Vishny, 1992; Gennaioli, Shleifer, and Vishny, 2015). This ‘headline risk’ is especially relevant for public pension funds governed by political board members (Goyal and Wahal, 2008; Andonov, Hochberg, and Rauh, 2018). These concerns may incentivize pension funds to hire investment consultants as a shield against public criticism and legal consequences, for reasons beyond their expertise or access to a network, and despite their failure to add value to participants and their conflicting interests (e.g., Binsbergen, Brandt, and Koijen, 2008; Jaiswal, 2017). ‘Headline risk’ may therefore generate a higher sensitivity to past pension fund performance.

We examine the role of investment consultants using the sample U.S. public pension funds.² According to the Financial Accounts of the United States, public pension funds are among the largest institutional investors in the U.S., reaching \$5.8 trillion in assets under management in 2021. Consultants serve as intermediaries in the institutional asset management market, and provide either general or specialized services. General investment consultants make recommendations on asset allocation policy, return expectations, managerial selection, and performance benchmarking. Specialized consultants advise in alternative asset classes, such as real assets, private equity and hedge funds, and their responsibilities focus primarily on managerial selection.

The number of pension fund consultants has increased over time, from an average of 1.6 consultants per fund in 2001 to 2.4 consultants in 2020, largely due to an increase in hiring of specialized consultants in alternative assets. At the same time, the number of unique consultants declined and the provision of consulting services became highly concentrated, with the top 10 general consultants advising almost 90% of the pension fund assets in 2020. The total number of unique consultants decreases despite the fact that new specialized consultants enter the sample.

We start our analysis by examining the characteristics of pension funds that rely more on the services of consultants. Larger pension funds and funds with higher allocations to alternative assets generally employ more consultants. For instance, a 10 percentage points higher allocation to private equity is associated with a 17.7 percentage points higher probability of hiring a specialized private equity consultant. We also note that pension funds hiring specialized consultants for the first time already have a higher target and an actual allocation to alternative asset classes. This finding suggests that the lack of experience is not the main driver for hiring consultants and that access and capacity are relatively more important considerations in hiring decisions. This conjecture is also supported by the fact that pension funds with target allocation to alternatives higher than the actual allocation are more likely to hire specialized consultants for the first time.

²In addition to public pension funds, investment consulting firms also provide services to sovereign wealth funds, university endowments, private pension funds, and other institutional investors.

Pension fund board composition also seems to influence the decision to hire consultants. Pension funds with more political trustees, and therefore more sensitive to public scrutiny, hire significantly more consultants, in line with a shifting responsibility argument. However, we find no evidence that pension funds governed by elected participants, which generally have lower skills in asset management (Andonov, Hochberg, and Rauh, 2018), hire more investment consultants.

We then ask why pension funds decide to replace general investment consultants. Most pension funds have a general consultant at the beginning of the sample period and almost all hiring and firing events during this period are a replacement of an existing general consultant. We find that past performance is the most important driver of the changes of general consultants, while differences in asset allocation policy do not explain these decisions. Pension funds are 4.4 percent more likely to replace a general consultant when 3-year performance decreases by one standard deviation. Focusing on performance ranking across the cross section of pension funds, we find that if relative 5-year ranking of a pension fund decreases from the 75th to 25th percentile, the probability that this pension fund hires a new general investment consultant increases by 3.3 percentage points. This increase is economically large as the baseline unconditional probability to hire a general consultant in a given year is 5.8%. This relationship is not linear as pension funds replace existing consultants only in response to extreme low performance. Differences in asset allocation policy do not explain the changes of general consultants. We conclude that the negative relation between prior performance and hiring events primarily supports the shifting responsibility hypothesis.

Our next question focuses on the choice of general consultants among several candidates. Our initial pool of potential candidates includes the list of all investment consultants employed by at least one pension fund during our sample period. We further collect additional information on these consultants from the SEC ADV filings. We find that pension funds prefer to hire larger consultants that combine advisory and asset management services, despite their conflicting interest and potentially biased recommendations. For instance, consultants holding 50 percent of the assets in discretionary investment mandates have a 0.7 percentage points higher probability to be hired

compared to consultants with no assets in discretionary investment mandates. Pension funds also seem to prefer consultants advising plans of similar size or in a close geographical location. These findings, combined with the increased concentration of consulting providers suggests larger correlations between pension fund flows and performance in most recent years.

We then examine whether consultants make active changes to investments following their employment. Investment consultants can improve future performance through two different channels: by changing the asset allocation policy and by recommending better performing asset managers. Our results suggest that new general consultants make active recommendations regarding the asset allocation policy. One year after hiring a new general consultant, pension funds implement significant changes in their asset allocation in absolute terms, although the direction of these recommendations differs across pension funds. We also find that pension funds' performance improves following the hiring a new consultant, as funds move closer to their median peers in terms of performance ranking. However, the marginal performance improvement is statistically insignificant.

To further investigate whether specialized consultants provide improved access to new investment options, we rely on Preqin and expand our dataset to include more than 20,000 investments by public pension funds in private funds over the 2001–2020 period. There are four reasons why the commitments to private funds are a well suited setting to examine the hypothesis that pension funds hire consultants because they are powerful gatekeepers offering access to asset managers. First, public pension funds have increased substantially their allocation to private markets and need to hire an increasing number of private equity managers to meet their allocation targets. Second, private equity funds display a large spread in performance, and the ability to identify and access top-performing general partners is likely to have substantial influence on overall pension fund performance. Third, the relative opacity of alternative asset class raises the potential for specialized investment consultants to create a valuable network that provides access to better investments. Finally, commitments to private equity funds have a clear investment date at which it is entered

into, namely, the fund’s vintage year. We can therefore attribute each investment decision to the investment consultant who advised the pension fund in that specific year.

To test the rationed access hypothesis, we characterize private funds commitments on three dimensions: (a) the private fund is the first fund raised by the general partner; (b) the private fund is the first fund raised by the general partner within the specific series of funds raised by this general partner; (c) the ratio of a final private fund size relative to the initial target fund size. Our results suggest that specialized real assets consultants help accessing later stage funds and reduce allocation to first-time private funds. We also find that that specialized private equity consultants help accessing oversubscribed private funds, which are typically associated with rationed access to limited partners, indicating that consultants improve access. These results hold both in the cross-section of pension funds as well as within individual pension funds.

We then further ask whether investments into private funds perform better in pension funds relying on the services of specialized consultants. Using two standard measure of performance in private funds, the internal rate of returns (IRR) and the multiple of invested capital, our analysis shows that this is not the case, suggesting no discernible fund access abilities. In the cross-section of pension funds and within individual pension funds, we do not find any differences in the performance of pension funds that use specialized consultants and pension funds that do not use specialized consultants.

To conclude, our paper contributes to a small but growing literature focusing on investment consultants. While prior research examines the value added by existent consultants’ recommendations on managerial selection (e.g., Goyal and Wahal, 2008; Jenkinson, Jones, and Martinez, 2016; Rossi, Blake, Timmermann, Tonks, and Wermers, 2018; Goyal, Wahal, and Yavuz, 2021) our paper isolates the impact of consultants on investment choices and performance following their hiring or dismissal. Their growing importance as intermediaries in pension plans’ management prompts a better understanding of their incentives, conflicts of interest and implications for retirement benefits.

2 Institutional Background and Data

Our sample of U.S. public pension funds is based on the Public Plans Database (PPD), published by the Center for Retirement Research at Boston College. The dataset is collected from the Comprehensive Annual Financial Reports (CAFRs) of pension plans and includes information on total assets under management, actual and target asset allocations, and performance at the pension plan level. Frequently, the assets of multiple pension plans are pooled together and managed by one pension fund or retirement system. For example, Washington State Investment Board is responsible for the asset allocation and management of the Washington PERS 1/2/3, LEOFF 1/2, School Employees 2/3, and Teachers 1/2/3 pension plans. We therefore aggregate the information for all pension plans that are managed jointly at pension fund level.

Our sample covers 176 unique pension funds from 2001 to 2020 period, corresponding to 3,070 fund-year observations. Collectively, these pension funds manage a significant amount of retirement assets in the U.S., reaching almost \$4.2 trillion in 2020. We show summary statistics at the fund level in Table 1, Panel A. The table shows that the average pension fund has \$19 billion in assets, although the distribution is skewed to the right as several large funds dominate this space. In terms of performance, the PPD dataset provides annual returns in percentage points, but it does not distinguish between gross and net returns. We follow Andonov and Rauh (2022) and calculate the net return, which excludes investment costs, as the ratio between the net investment income and the total assets at the beginning of the year.³ Based on our measure, the average return of pension funds is 6% per year.

The average pension fund has an asset allocation target of 51% to public equity, 26% to fixed income, 9% to real assets, 6% to private equity, and 5% to hedge funds. The remaining part is allocated to cash or other risky assets. Other risky assets include undifferentiated broad portfolios of alternative assets and other assets. Figure 1 Panel A shows that pension funds have decreased the

³The net investment income incorporates the changes in value of the assets (capital gains), dividends, interest payments, investment expenses in all asset classes, and security lending income and fees.

target allocation to public equity and fixed income assets from approximately 90% in 2001 to 70% in 2020, and increased the target allocation to alternative assets from 10% in 2001 to 30% in 2020.

Following Bradley, Pantzalis, and Yuan (2016), we identify the pension funds that have an internal asset management division using Thomson-Reuters 13F data, which reports of direct equity holdings. These pension funds do not delegate all asset management decisions to external managers, and make at least some buy-sell decisions for public equity within the fund. We find that 22 pension funds, which represent less than or 11% of our sample, have an internal asset management division.

We extend the PPD dataset with information on pension fund governance from Andonov, Hochberg, and Rauh (2018). *%State Political* captures the percentage of appointed or ex officio pension fund board members who are state officials, such as state treasurer, controller, personnel director, senators, representatives, elected officials of local government, and school board representatives. On average, appointed and ex officio politicians represent around 27% of the board members. *%Elected Participants* captures the percentage of board members who are ex officio union representatives or elected by plan participants. The elected participants account for 35% of the board members. *Investment Board* is an indicator equal to one if a pension fund is governed by a separate investment board that only makes asset allocation and investment decisions and it has another board that is responsible for other administrative retirement tasks. Only 11% of the pension fund-year observations have a separate investment board.

We hand-collect the list of pension fund investment consultants from the pension fund Comprehensive Annual Financial Reports (CAFRs) and plans' websites, as well as newswire articles on the Pensions & Investments website. We classify pension fund investment consultants based on their roles into general or specialized consultants. General investment consultants make recommendations on the asset allocation policy, formulating return expectations, selection of asset managers, benchmarking of performance, asset-liability management, risk control policies (including use of derivatives, security lending, etc.), reporting, and education services (Jenkinson, Jones, and Martinez, 2016; Andonov and Rauh, 2022). Specialized investment consultants are typically hired in

alternative asset classes, such as real assets, private equity and hedge funds, and have a narrow set of responsibilities, focusing primarily on the selection of asset managers and performance evaluation. Since our analysis focuses on investment consultants, we exclude other types consultants which have a non-investment role, such as firms providing actuarial services, audit reports, headhunter searches, and organizational services. We also exclude firms hired to provide only proxy-voting advisory services.⁴

We show summary statistics on consultants at fund level in Table 1, Panel B. Pension funds employ two investment consultants, on average, by year. Typically, only one consultant is a general consultant with broader responsibilities. Only 15 pension funds did not have a general consultant during our sample period, and mostly in the early part of our sample. Panel B of Figure 1 shows that the percentage of pension funds using a general consultant increases from 92% in 2001 to 96% in 2007 and remains stable afterwards.

Most specialized investment consultants are hired to offer advise on alternative assets investments. On average, 37% of the pension fund-year observations have a real assets consultant, 34% report a private equity consultant, and 12% report a hedge funds consultant. *Other consultants* variable captures investment consultants hired for specialized responsibilities in other assets, such as emerging equity markets or high yield credit, but they only account for a small part of specialized consultants. Pension funds typically do not rely on specialized investment consultants in traditional asset classes, such as public equity and fixed income.

Panel B of Figure 1 shows that the percentage of pension funds relying on specialized consultants in alternative asset has increased over time. The percentage pension funds using private equity consultants increases from 13% in 2001 to 43% in 2020. Similarly, the number of hedge funds consultants increases from zero to 17% in 2020. The number of pension fund - consultant relations is higher for larger pension funds which hire multiple specialized investment consultants in the

⁴Our analysis focuses on investment consultants that remain employed by the fund for at least one year. We remove short term consultants hired to support the general consultant on specific short-term projects for less than one year.

same alternative asset class. For instance, Teacher Retirement System of Texas had one specialized consultant for domestic private equity investments and another specialized consultant for international private equity investments from 2005 to 2010. Figure 1 shows that the increased reliance on specialized consultants closely follows the increased target allocation to alternative assets.

Table 2 reports additional summary statistics on pension consultants. Panel A shows the number of unique consultants in our sample of pension funds. Panel B shows additional information on the sub-sample of the general consultants. Overall, our sample of 176 pension funds employ 151 unique investment consultants. There are 59 unique general consultants, but the top 10 firms in terms of number of clients or assets under advice account for the vast majority of the pension-fund-consultant relationships. Figure 2 Panel A shows that the concentration of consultants has increased further over our sample period. The percentage of pension funds advised by one of the top 10 general consultants has increased from 65% in 2001 to 86% in 2020, while the percentage of pension funds advised by one of the non-top 10 general consultants has decreased from 27% to 9% during this period. The concentration is also visible after weighting by assets under advice as Figure 2 Panel B shows that the top 10 general consultants have \$3.7 trillion assets under advisory.

The industry of specialized consultancy services is also concentrated as we observe only 45 unique real assets consultants, 44 unique private equity consultants, and 19 unique hedge funds consultants. The number of pension-fund year observations without a specialized consultant is substantial because many pension funds do not rely on their services. However, those pension funds that hire a specialized consultant usually choose one from the few dominant companies. Figure 3 shows that the top 5 real assets, private equity and hedge funds consultants account for the majority of relationships and assets under advisory. As the number of pension funds using specialized consultants is increasing over time, we observe that other non-top 5 consultants increase their share in real assets and private equity over time, but the industry remains highly concentrated.

We collect additional information on general consultants from form ADV filed with the SEC and disclosed on the Investment Adviser Public Disclosure website. This form contains detailed

information on investment consultants, such as location, assets under management, and clients, but it is only available from 2010 to 2020.⁵ We summarize the collected information in Table 2, Panel B. The median consultant advises 176 clients. Most consultants combine advisory services with other asset management responsibilities. Consultants that engaged in asset management typically manage 61% of the assets emerging from discretionary mandates. On average, 39% of the consultants in the sample are specialized in pension funds, as more than 51% of their clients are pension funds.

The form also allows us to identify each year which consultants face legal charges such as felony, misdemeanor, false statement, or violation of investment-related regulations. Interestingly, our analysis reveals that these consultants account for almost 30% of observations.⁶ Finally, the form ADV allows us to investigate whether general consultants prefer to work with pension funds of similar size or location. *%PF Clients Same Size* shows that consultants advise, on average, 14% of pension funds from the same size quartile. However, *%PF Clients Same State*, which measures the percentage of pension funds advised by the consultant that are located in the same state with the consultant, reveals that location is relatively unimportant (4% of the pension fund clients).

3 Establishing Consulting Relationships

We proceed with our investigation by looking into the factors that determine the number of consultants and their turnover, at pension fund level. The next section further narrows the focus on the choice of individual consultants based on their characteristics and past behavior.

3.1 Which Pension Funds Have More Consultants?

The first question we ask is whether certain pension funds are more likely to rely on external investment consultants than others. Therefore, we start by examining whether the total number of

⁵The ADV form structure has changed in 2011, 2012, 2014 and 2018 with new questions being added to the form every year. To construct our variables, we start from the list of questions available in 2020 and we match them with the corresponding questions in earlier reports. Next, we rely only on the questions that are populated throughout the sample period.

⁶Item 11 of the ADV Form, Part 1.

general and specialized consultants depends on pension fund characteristics, such as size, target asset allocation and governance.

The size of the pension fund may affect number of consultants in several ways. Large pension funds have more assets under management, allowing them to spread the fixed part of consultants' compensation across a broader portfolio of assets and thus hire more consultants. At the same time, large pension funds can also afford to attract more qualified internal personnel by offering higher compensation packages. If larger pension funds have more internal expertise, we expect however less reliance on external investment consultants. Asset allocations into alternative assets may also be associated with a larger number of consultants, as more specialized expertise or access to these asset classes is needed. Also, substantial gaps between actual and target allocations may be associated with less than optimal use of consultants. In terms of governance, we expect that pension funds with more politicians and elected participants serving as trustees hire more consultants, albeit for different reasons (headline risk or lack of skills).

We present our results in Table 3. Columns (1) and (2) show the results of an OLS regression where the dependent variable is the total number of general and specialized consultants. Column (3) repeats the analysis for the number of specialized consultants only. Columns (4) to (6) show the marginal effects of a logit specification, where we model the probability that a pension fund employs a specialized consultant in real assets, private equity, and hedge funds.⁷ All specification include year-by-reporting-month fixed effects because pension funds have different fiscal-year ending dates, and standard errors clustered by pension fund. We exclude from all the regressions the pension funds reporting in March, August and September, because the interpretation of any result with year-month fixed effect will be difficult. In fact, only few pension funds report in these months. In total we exclude 7 pension funds. Therefore, the total number of pension fund analyzed goes from 176 to 169.

⁷We do not analyze separately the probability to have a general investment consultant as only 15 out of 176 pension funds in our sample do/did not have a general investment consultant.

The results presented in Table 3 show that, generally, larger pension funds hire more investment consultants. They are also more likely to hire one or more specialized consultants in alternative assets. Column (1) shows that a one unit increase in the natural logarithm of pension fund assets under management is associated with 0.55 increase in the number of consultants employed by the pension fund. Similarly, Column (4) shows that a one unit increase in the natural logarithm of pension fund size increases the probability of having a specialized consultant in real assets by 24.7 percentage points. In column (4)-(6), we also find that pension funds with an internal asset management division are less likely to use specialized consultants.

Target asset allocations in various asset classes may further explain the number or the probability of using consultants. Figure 1 already suggests that target asset allocation to alternative assets may be positively related to the total number of consultants. Columns (1)-(3) of Table 3 confirms that higher target allocation to real assets and private equity is associated with more investment consultants. For instance, in Column (2) a pension fund with a 20% target allocation to real assets has 1.1 ($=0.2 \times 5.398$) more consultants as compared to a pension fund without target allocation to real assets. Looking at Column (5), a pension fund targeting 10 percentage points higher allocation to private equity has 17.7 percentage points higher probability to employ a specialized private equity consultant.

Thus, the shift to alternative assets is accompanied by an increased procurement of specialized investment consultant services, but it is not clear whether these specialized consultants push pension funds into alternative assets. To address these questions we include controls for the difference between the lagged target and actual allocation in each risky asset class. These gap variables measure how far pension funds are from their strategic target asset allocation. One potential reason why pension funds hire more specialized consultants is that their desired target allocation is substantially higher than their current actual allocation, so they need specialized consultants to select many asset managers in order to meet the target allocation. We find that the the difference between the lagged target and actual allocation is not significantly related with the probability to

have a specialized consultant. However, it is important to stress that with these specifications we are not yet investigating the actual hiring of specialized consultants.

Finally, pension fund governance may play a role in explaining the type and the number of consultants hired. Table 3 shows that pension plans governed by boards with more politicians and elected participants serving as trustees hire more consultants. For instance, a one standard deviation increase in the percentage of state political board members is associated with 0.2 ($=0.22 \times 0.832$) increase in the number of consultants. The increased reliance of politicians on investment consultants is consistent with prior evidence which suggests that boards dominated by politicians are more sensitive to headline risk and therefore prefer to shift the responsibility in case of poor performance (Goyal and Wahal, 2008; Andonov, Hochberg, and Rauh, 2018). Their preference to rely on consultants is unlikely due to a lack of skills, as these trustees have solid financial education and expertise as compared to other trustees. In fact, our results suggest that lower skills and expertise in the board is not an explanation for why pension funds use more consultants, as there is no significant relation between the share of elected plan participants and number of hired consultants (Andonov, Hochberg, and Rauh, 2018; Dyck, Manoel, and Morse, 2022).

Overall, pension funds which rely more heavily on consultant services differ significantly from pension funds that do not. Pension funds use more consultants when they are larger, have more investments in alternative assets, and have more politicians on their board.

3.2 Why Do Pension Funds Replace General Consultants?

This section discusses the hiring and the termination of general investment consultants. We define a hiring event as the first year when a new general investment consultant starts advising the pension fund. Figure 4 Panel A and Table 4 show that our sample contains 194 hiring events of new general consultants. Since the vast majority of pension fund had a general consultant even before our sample period starts and there is only one general consultant position, 185 out of 194 events are

hirings to replace a dismissed general consultant. There are only 8 events when a pension fund hires a general consultant for the first time.

We define a termination event to be equal to one in the last year when an old general consultant was advising the pension fund. Thus, the firing events are defined one year before the hiring events in our dataset and this explains the marginal difference in the total number of events. We observe 187 firing events and in 183 cases a pension fund hires a new general consultant as a replacement in the subsequent year. There are only 3 firing events when a pension fund stops using general investment consultant services. Figure 4 Panels A and B show that the hiring and firing events are distributed over the entire sample period, but there is higher turnover from 2008 to 2010 period, in the aftermath of the global financial crisis. We therefore use time fixed effects in our analyses, as market movements can create trends in the turnover of consultants.

We start by examining the probability a pension fund hires a general consultant in a logit framework. The dependent variable equals to one in the first year when a new general consultant starts advising the pension fund. We do not distinguish between hiring for the first time and hiring as a replacement for dismissed consultant since the sample of first-time general consultant hirings is small. We model the probability of hiring a general consultant as a function of pension fund characteristics, paying particular attention to the measurement of prior performance.

Our performance metrics focus on plan performance over the previous 3 or 5 years, which is the typical standard contract length for general consultants. Thus, when analyzing the role of prior performance, we estimate our performance metrics over similar periods. Our conjecture is that pension funds boards may not necessarily react to bad performance in absolute value, but also to the performance relative to the other pension plans, which may be highly skewed. We therefore use two different performance measures: (1) geometric average of plan returns; (2) relative performance ranking.⁸ We construct the relative ranking variables by sorting pension funds within

⁸For instance, if a new general consultant is hired, *3Y Return* will measure the geometric average return in the three years before the hiring event, which captures also the last year of the dismissed consultant.

every year-reporting-month based on their geometric average return over the previous three (five) years. The percentile ranking variable is standardized by the total number of pension funds within each year-reporting-month group so it is bounded between zero and one, where one corresponds to the pension fund with the best past performance. All specifications include year-reporting-month fixed effects because pension funds have different fiscal-year ending dates. The year-reporting-month fixed effects also absorb any time-series variation in market returns. This fixed effects structure enables us to study the role cross-sectional differences in past performance and interpret the coefficients on past performance as peer-adjusted returns. It follows that the performance ranking for pension funds reporting in months where only another (or none) pension fund also reports would be meaningless. Hence, our decision to exclude the pension funds reporting in March, August and September.

We show the results of our investigation in Table 5. The results suggest that past performance is a strong predictor of a general consultants hiring. Focusing on Column (1), if a pension fund has a one standard deviation lower performance in the past three years, the probability to hire a new general consultant increases by 4.41 percentage points ($= -0.05 \times -0.882$). This is an economically substantial increase as the baseline unconditional probability to hire a general consultant is 5.8%.⁹ Columns (3) and (4) confirm that the negative relation between prior performance and hiring events is driven by performance comparisons relative to the other pension funds. In these specifications, we use relative ranking instead of geometric average return as a proxy for prior performance. Looking at Column (4), if the relative 5-year ranking of a pension fund decreases from the 75th to 25th percentile, the probability that this pension fund hires a new general investment consultant increases by 3.3 percentage points ($= -0.5 \times -0.065$).

We further explore the the relation between hiring decisions and past performance by examining whether pension funds show a stronger stronger sensitivity to extremely bad performance. We therefore create two performance segments, evaluating the pension plan's response to performance

⁹After excluding pension funds reporting in March, August and September we have 183 hirings of general investment consultants.

separately for below median and for above median ranks, in a piecewise linear manner. Equations 1 and 2 define these two variables based on the percentile ranking over the previous three or five years.

$$Low\ 3Y\ Rank_{i,t} = \min(3Y\ Rank_{i,t}, 0.5) \quad (1)$$

$$High\ 3Y\ Rank_{i,t} = \max(3Y\ Rank_{i,t} - 0.5, 0) \quad (2)$$

Thus, the coefficient on *Low 3Y Rank* and *Low 5Y Rank* capture the sensitivity of consultant hiring to performance percentile ranking below and above median. The results, presented in Column (5), show that pension funds mostly replace general consultants only in the event of bad performance. If the 3-year ranking of a pension fund decreases from the 50th to 25th percentile, the probability that this pension fund hires a new general investment consultant increases by 3.1 percentage points ($= -0.25 \times -0.122$). However, if the 3-year ranking of a pension fund decreases from the 100th to 75th percentile, the probability that this pension fund hires a new general investment consultant does not change.

In addition to past performance, we find that larger pension funds change their general consultants more frequently. The coefficient on pension fund size is positive and significant which shows that larger pension funds have a higher probability to recruit a new general consultant. Pension funds with an internal asset management divisions seem to retain their general consultants for a longer period of time, as they have a lower probability to hire a new consultant.

We also control for the target asset allocation to all risky asset classes as well as for the gap between the lagged target and actual allocation. These asset allocation variables are economically and statistically insignificant suggesting that the turnover of general consultants is not driven by the asset allocation policy.

Table 6 presents a robustness of the hiring results as we analyze the probability that a pension fund fires a general consultant. The dependent variable equals to one in the last year when the old general consultant stops advising the pension fund. We do not distinguish between firings with and without replacement as there are only two firing events without a replacement of the general

consultant. We confirm that past performance relative to the other pension funds is the main driver of changes in the consulting company. Pension funds that have a lower ranking based on past performance are more likely to fire their existing general consultant.

3.3 Why do Pension Funds Hire Specialized Consultants?

Next, we analyze the determinants of hiring a specialized investment consultant. As shown in Figure 1 Panel B, the percentage of pension funds having a specialized consultant in real assets, private equity, and hedge funds has increased over time. We distinguish four different types of specialized investment consultants hirings. First, pension funds could hire a specialized investment consultant for the first time. Figure 4 Panel B shows that our sample contains 154 events of first-time hirings of specialized consultant (43 in hedge funds, 62 in private equity, and 49 in real assets). Second, pension funds could hire a new specialized consultant as a replacement for terminated consultancy mandate. We observe 11 replacement hirings in hedge funds, 66 in private equity, and 54 in real assets. Third, pension funds are not limited to having only one specialized consultant per asset class and could hire an additional new specialized consultant.¹⁰ These additional hirings are a small part of the events as we observe only 5 additional hirings in hedge funds, 26 in private equity, and 24 in real assets. Fourth, we observe 16 events in which specialized investment consultants are replaced only after two or more years (long replacement). In these cases, the additional specialized consultants cover the functions of the dismissed consultant during the vacancy period. Based on Figure 4 Panel B, the hirings of specialized consultants are relatively equally distributed over time with some peaks in the 2010–2013 period.

Figure 4 Panel D reports the terminations of specialized consultants. The majority of terminations, 130 out of 228 cases, are followed by a replacement and hiring of a new specialized consultant. Only in 88 firing cases, pension funds fire a specialized consultant without a replacement.

¹⁰These additional hirings of specialized consultants are often due to creating more specific mandate, such as splitting the consultancy services in private equity into a consultant for selecting domestic private equity general partners and a consultant for selecting international private equity general partners.

In Table 8, we examine the decision to hire a new specialized consultant as a function of pension fund characteristics and investment policy. We report the marginal effects of logit specifications and the unit of observation is on a pension-fund-asset-class-consultant-year level. Thus, every pension fund appears three times in the sample in every year, as the dependent variable captures whether pension fund i hired a new specialized consultant in asset class j in year t . Since pension funds have a different baseline probability to hire consultants in the three alternative asset classes, we include indicators for specialized consultants in private equity and hedge funds (and the omitted category is real assets).

In Columns (1) to (3) of Table 8, the dependent variables equals to one for all three types of specialized consultant hirings. In Columns (4)-(6), the analysis focuses on hirings for replacement of terminated consultant and the sample is limited to pension funds that already have a consultant and could potentially look for a replacement. The dependent variable equals to one if a pension fund hires a new specialized investment consultant as a replacement for the fired specialized consultant in the previous year. In Columns (7)-(9), we analyze the probability to hire a specialized investment consultant for the first time and we limit attention to the subsample of pension funds that do not have a specialized consultant and could hire potentially for the first time. The dependent variable equals to one if a pension fund hires for the first time a specialized investment consultant in real assets, private equity or hedge funds.¹¹

Our main focus is on the role of pension fund asset allocation. Over the 2001–2020 period pension funds have increased their allocation to alternative assets and recruited more consultancy firms specialized in these asset classes. We find that the changes in target asset allocation precede the hirings of specialized investment consultants. Pension funds with higher lagged target or actual allocation to alternative asset classes are more likely to hire a specialized consultant. Based on Column (2), if a pension fund has 10 percentage points higher target allocation to one alternative

¹¹We do not analyze separately the hirings of additional new specialized consultants, or long replacement, as these hiring decisions account for a small share of the total sample.

asset class, the probability that this pension fund hires a specialized consultant increases by 0.80 percentage points.

The positive relation between lagged allocation and hiring probability is driven by the first-time hirings. The hirings of specialized consultants as a replacement of terminated consultants are not significantly related to the asset allocation policy. Column (7) shows that if a pension fund has 10 percentage points higher target allocation to one alternative asset class, the probability that this pension fund hires a specialized consultant for the first time increases by 0.66 percentage points. The positive relation with the lagged actual asset allocation and gap between past target and past actual allocation (column 9) show that pension funds using specialized consultants for the first time already have prior experience with investing in the alternative asset class, so it is not the inexperienced funds that require more advisory services. Thus, we find that specialized consultants do not seem to direct pension funds into alternative assets, but rather pension funds have a higher target or actual allocation to alternative assets already before hiring a specialized consultant. It seems that pension funds increase their allocation to alternative assets without the inference of specialized consultants, but require later specialized advisory services to select asset managers (general partners) to meet the higher allocation target. In line with this conjecture, those pension funds that already have a specialized consultant and decide to increase their allocation to alternative asset classes are less likely to replace the existing consultant (column 5).

Similar to the results on general consultants, we observe that larger pension funds change also their specialized consultants more frequently. The baseline probability to work with an investment consultants differs across the alternative asset classes. Pension funds have a higher probability to recruit a new private equity and lower probability to hire a hedge funds consultants as compared to the omitted category, real assets.

Overall, our analysis documents that pension funds have increased the number of consultants over time, but most of this increase is due to increased increased reliance on specialized consultants in alternative assets. Most pension funds maintain a relation with only one general consultant over

the entire sample period. The hiring of specialized consultants follows a change in target asset allocation from traditional to alternative assets, rather than causing this trend.

4 Selecting Investment Consultants

In the previous section we asked what are the characteristics of pension funds that use pension consultants and what is their motivation to hire or terminate such relationships. In this section, we ask what are the consultant dimensions that pension funds use in their selection of general consultants. The main question is therefore, how do pension funds select any particular consultant from a pool of potential candidates. We hypothesise that the set of potential consultants includes all general investment consultants that were employed by at least one pension fund during the sample period. The opportunity set differs across years as we take into account mergers of consultants, closure of existing consultants, and establishment of new consultancy firms.

We collect information on the potential consultants from the ADV filings and focus on a set of relevant variables. *LogClients* represents the number of clients served by the investment consultant and a proxy for consultant's size. *%Discretionary AUM* measures the percentage of assets managed by the consultant under discretionary mandate. Higher values of this variable capture investment consultants that also have a substantial discretionary asset management business, while zero or low values correspond to pure consultancy firms that are not a subsidiary of asset management firm. We also include indicators for the relative importance of pension fund clients relative to other clients, which we categorize based on the percentage of the pension funds assets under advisory. Finally, we control for consultants facing legal charges such as felony, misdemeanor, false statement, or violation of investment-related regulations.

In addition to the ADV information, we construct also two additional variables that capture the size and the location of potential candidates. First we split all pension funds in our sample into four quartiles based on assets under management. Then we calculate *%PF Clients Same Size* as the the percentage of pension funds served by the consultant that belong to the same size quartile as

the pension fund making the hiring decision. *%PF Clients Same State* focuses on the geographical network of pension fund-consultant relations and measures the percentage of pension funds served by the consultant that are located in the same state as the pension fund making the hiring decision.

We model the probability of hiring a particular pension consultant in a logit framework where the dependent variable equals to one for the general investment consultant that was actually hired. Table 7 presents the marginal effects of our logit estimation. Our analysis is limited to 95 hiring events of general investment consultants as ADV information is only available from 2010 to 2020 sub-sample. Over this period, each pension fund can choose from a set of 48 unique general consultants.¹² The baseline unconditional probability to hire one consultant equals to 2.22%.

We find that pension funds prefer to hire larger investment consultants. Based on Column (1), a one unit increase in the natural logarithm of the number of consultant's clients is associated with 0.3 percentage points increase in the probability to hire that consultant. We also find that pension fund have a significant preference for consultants that offer advisory and asset management services. For instance, Column (2) shows that a consultant that holds 50 percent of the assets in discretionary investment mandates has a 0.7 percentage points higher probability to be hired as compared to a consultant that has no assets in discretionary investment mandates. Thus, pension funds seem to reduce their relations with consultants that do not combine advisory and asset management services.

Pension funds also seem more likely to hire consultants that service pension funds with similar size and located in the same state. Based on Column (4), a pension fund has a 1.1 percentage points higher probability to hire a consultant that advises 50% similarly sized pension funds than a consultant that does not advise similarly sized pension funds. If a consultant advises 50% of its pension fund clients that are funds located in the same state of a pension fund under examination,

¹²The number of consultants in the opportunity set of general consultants is 48 and not 59 as in Table 2 because seven consultants either do not exist after 2010 or cannot be merged with AVD SEC data.

it has 1.9 percentage points higher probability to be hired than a consultant that does not advise any other pension funds in the same state where the pension fund under examination is based.

The selection of investment consultants is negatively affected by legal charges against the consultancy firm (column 5). However, one limitation of our measure is that it does not take into account the severity of legal issues. Almost one third of the consultants in our opportunity set face a legal issue, but we cannot distinguish between mild and severe legal cases as the ADV form includes only an indicator for legal issues.

We find that pension funds prefer to hire investment consultants that advise primarily pension funds rather than other types of institutional investors. Column (6) shows that the probability to be selected is significantly higher for consultants whose pension fund clients account for 26-75% of their total amount of assets under advisory.

Based on Column (7), our results are robust to including all variables that capture different investment consultant characteristics in the same specification. Overall, pension funds prefer to select larger consultancy firms that are engaged also in discretionary asset management. Pension funds seem to segment across consultants with experience in the pension industry based on size and geographical location.

5 Allocation Changes and Future Performance

The previous section documents that pension funds prefer hiring from the pool of large consultants who work with other clients of similar size and with a significant business revenue from pension consulting. These findings are consistent with the observed concentration in pension consulting as presented in Figures 2 and 3. In this section, we analyze whether pension funds are able to improve their performance through the selection and termination of investment consultants.

Investment consultants could add value through two different channels. First, general investment consultants could provide valuable advice on the optimal asset allocation policy. New specialized

consultants could also provide access to well-performing asset managers that rationed access to clients advised by the previous consultants. The rationed access channel is more relevant in alternative asset classes (Sensoy, Wang, and Weisbach, 2014). Second, general and specialized consultants could add value by recommending better asset managers. The new consultants could be more skilled in selecting and recommending better asset managers, though there is no prior evidence on their selection ability (Jenkinson, Jones, and Martinez, 2016).

5.1 Allocation changes after consultant turnover and access to new investments

In Table 9, we focus on the first channel and examine the changes in target asset allocation. The dependent variables measures any changes in the allocation to risky asset classes, such as equities and alternatives, in the year following the hiring event. Panel A shows that there is no particular asset class share that consultants prefer to increase (or decrease) in the year following their hiring. In contrast, new general consultants seem to recommend changes in the pension fund asset allocation policy, but the direction of these recommendations differs across clients. In Panel B, the dependent variable captures the absolute changes in target asset allocation weights. We find that one year after hiring a new general investment consultant pension fund implement larger changes in their allocation weights in absolute terms. Based on Column (2), which includes pension fund fixed effects, pension funds change their target allocation to equity by 0.8 percentage points one year after hiring a new general investment consultant.

In Table 10, we examine whether new specialized consultants allow increased access to rationed alternative asset classes. For this analysis, we use Preqin to expand our dataset and include all individual capital commitments to private assets funds made by pension funds over the period 2001 to 2020. To test the rationed access hypothesis, we characterize private funds commitments on three dimensions: (a) the private fund is the first fund raised by the general partner; (b) the private fund is the first fund raised by the general partner within the specific series of funds raised by this general partner; (c) we compute the ratio of a final private fund size relative to the initial target fund size.

These variables are then interacted with categorical variables indicating whether the pension fund relied on the services of a specialized private equity (PE) or real asset (RA) consultant in the year in which the capital commitment was made. The results in columns (1)-(8) show that specialized RA consultants help accessing later stage funds and reduce allocation to first-time private funds. These results are only significant within pension funds, i.e. after including pension fund fixed effect. Hence, pension funds seem to improve access over time, after that RA consultants are hired. The results in Columns (9)-(12) indicate that specialized PE consultants help accessing oversubscribed private funds. This also indicates that consultants improve access, because funds that are oversubscribed can be seen as better (ex-ante) investments. These results hold both in the cross-section of pension funds and within individual pension funds.

5.2 Plan performance after consultant turnover and the impact of specialized consultants

Table 11 shows the performance of pension funds before and after consultant hiring, using two measures for returns and different return windows. We remove market wide events by calculating relative returns as the fund net-of-fee return minus average performance of all pension funds reporting in the same month. Consistent with the results presented in previous sections, new consultants are hired when pension funds perform poorly relative to their peers. The relative return in the three (two) years preceding the turnover is -86 (-58) bps and statistically significant. The differences in relative performance between the pre and post periods are positive but insignificant.

Next, to control for any potential skewness of returns across pension funds, we alternatively use rank returns, defined as percentile ranking of pension funds across several windows. The results of this analysis reveal that pension funds undergoing consultant changes generally rank below the median fund in years prior to the hiring event. In the subsequent years, these pension funds improve the relative ranking and obtain returns close to the median ranking. Thus, the overall change in rankings is positive (albeit marginally significant) over the two years following the event.

In Table 12, we investigate the relation between consultants hiring and the performance in alternative assets of pension funds. Using our expanded dataset on private funds commitments, we study two standard measure of performance in private funds: the internal rate of returns (IRR) and the multiple of invested capital. The results show that pension funds that rely on the service of specialized investment consultants do not report better performance in alternative assets than those pension funds without consultants. Also, within pension funds the performance does not change over time if a consultant was hired for the first time.

Overall, our results suggest that consultants make active choices by changing asset allocations and that plan performance improves only marginally after hiring. In fact, pension funds that performed below average pre-hiring go back to average performance after hiring. We also show that specialized consultants improve access to private funds, although, on average, their presence does materialize into better performing commitments.

6 Conclusion

Investment consultants are important intermediaries that advice public pension funds on designing target asset allocation policy, selecting investment managers, and monitoring performance. Pension funds have increased the number of investment consultants from 1.6 consultants per fund in 2001 to 2.4 consultants in 2020, particularly by hiring specialized consultants in alternative assets. In this paper, we ask what are the factors driving the hiring and firing of investment consultants, and whether these decisions have any impact on performance, and implicitly, on participants' benefits. The paper differs from the prior literature which mostly focuses on existing relations between pension funds and consultants. We aim instead to identify how these relationships are created in the firstplace, and whether they further propagate into sub-optimal choices of asset managers.

We examine three potential motivations of why pension funds rely on investment consultants. First, pension funds have a limited investment expertise and investment consultants could serve as informed intermediaries that add value. Second, pension funds may face limited access to investment

opportunities and investment consultants could act as powerful gatekeepers offering access to asset managers. Third, public pension funds are subject to headline risk and could hire consultants for hand-holding services and shifting of responsibility in case of poor performance.

We do not find supporting evidence for the poor investment expertise hypothesis as pension funds that could benefit most from the intermediaries expertise are not the ones relying more on investment consultants. For instance, pension funds that hire specialized investment consultants for the first time already have made multiple investments in that asset class in the previous years. In line with the limited access hypothesis, we find that pension funds that hire specialized investment consultants are more likely to invest in oversubscribed private equity funds and less likely to invest in first-time funds without track record. However, using a specialized consultant does not improve pension fund performance in private markets. In line the responsibility shifting hypothesis, we find that large pension funds with political board members hire more investment consultants. While we find that the turnover of consultants is strongly linked to past performance, there is only weak evidence that performance improves subsequent to a consultant replacement and that pension fund benefit from the increased the number of investment consultants over time.

When choosing consultants from their opportunity set, pension funds prefer to select larger consultancy firms that are engaged also in discretionary asset management. The increased preference for consultants that offer advisory as well as asset management services could be concerning for financial regulators because it might expose pension funds to more agency conflicts and biased recommendations. The increased concentration of consultancy markets and geographical segmentation may also increase the correlations in pension fund flows and performance. Our next analysis will take a closer look at investment manager level mandates and how they correlate with the characteristics of newly hired consultants.

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Figure 1: Pension Fund Investments Consultants and Asset Allocation

Panel A shows the average target allocation as a percentage of the total assets, by asset class, over time. Panel B shows the percentage of pension funds that have at least one consultant over time.

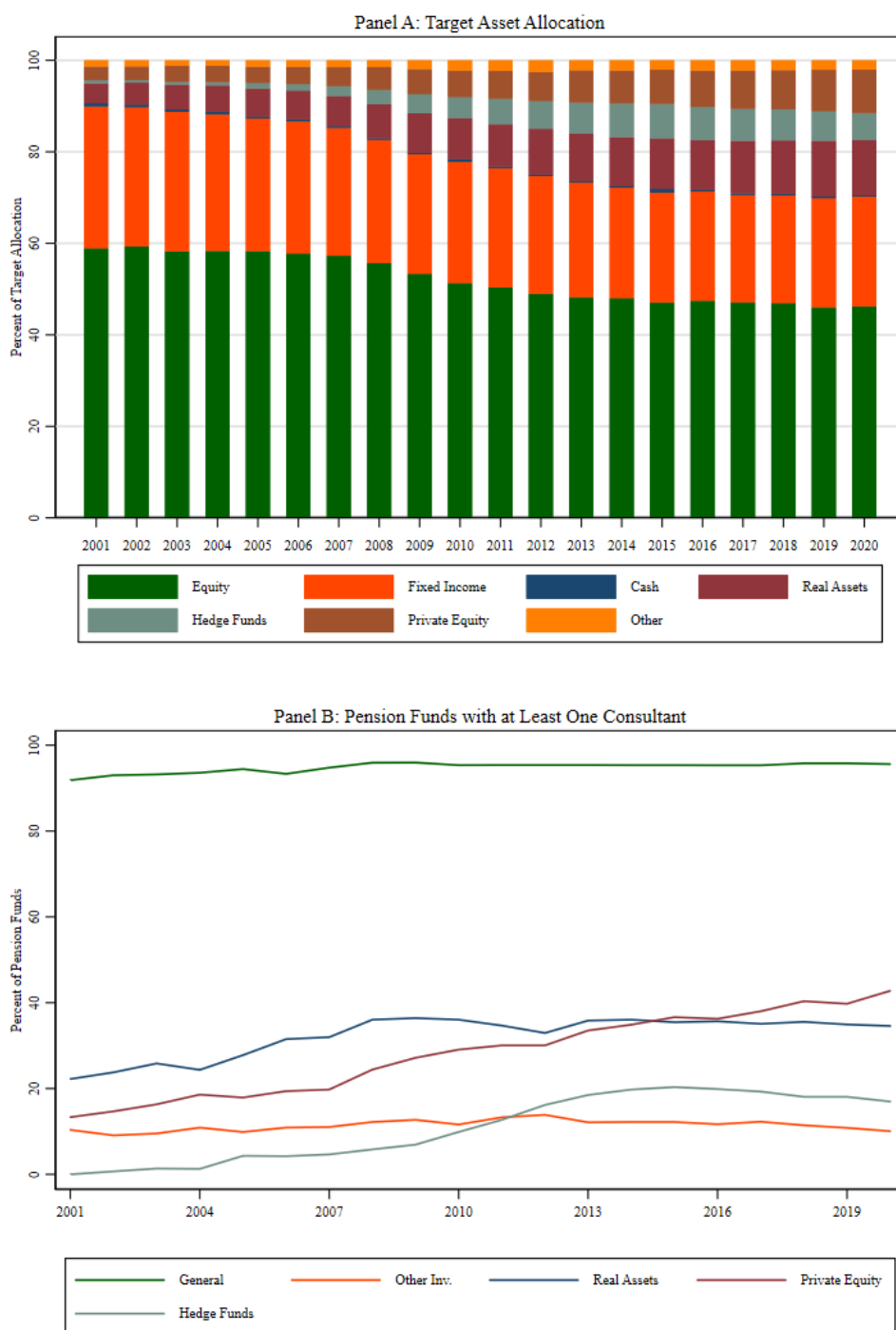


Figure 2: Concentration of General Consultants

Panel A shows the percentage of pension funds that are clients of the largest consultants in terms of number of clients, every year. It also shows the percentage of pension funds with no consultants or clients of smaller consultants. Panel B, displays the assets under managements of pension funds, based on the size of their consultants.

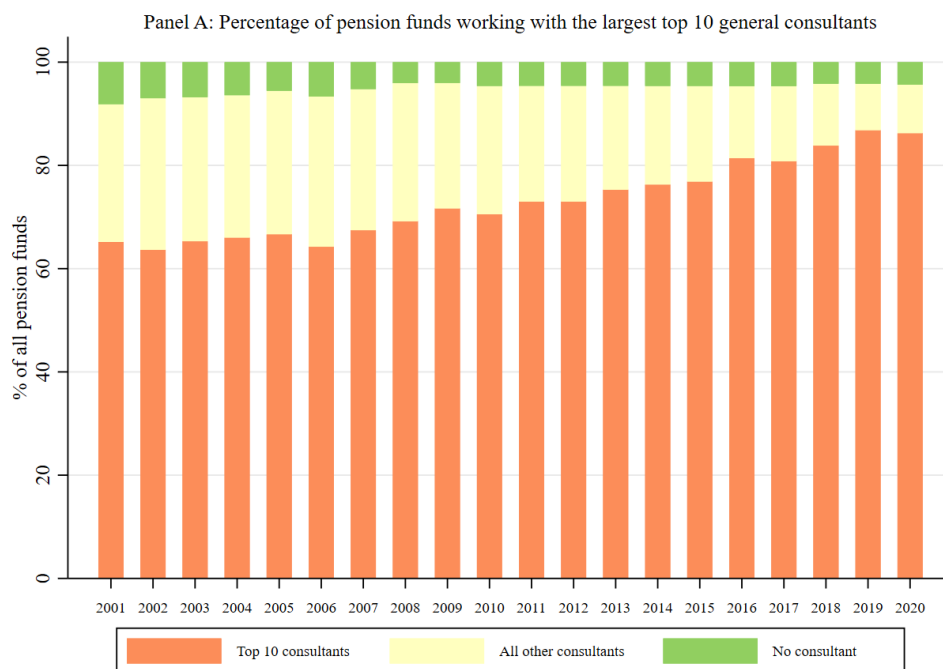
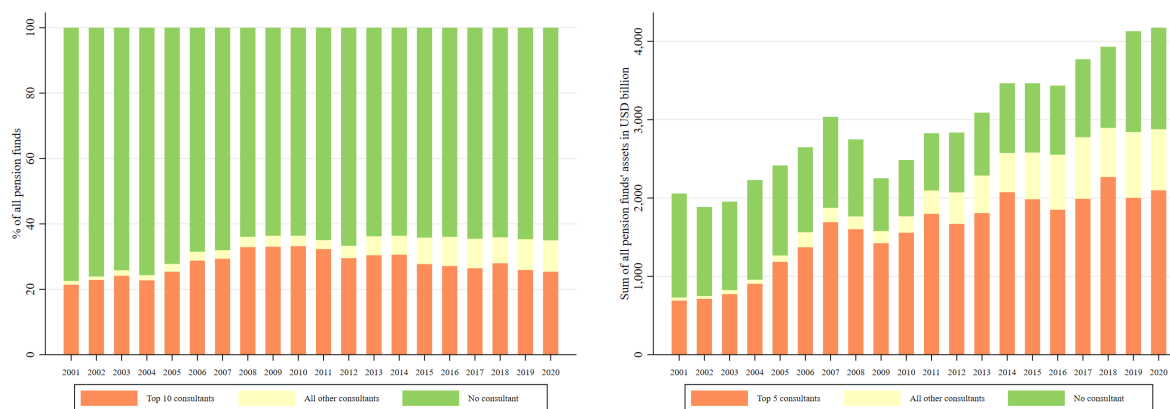


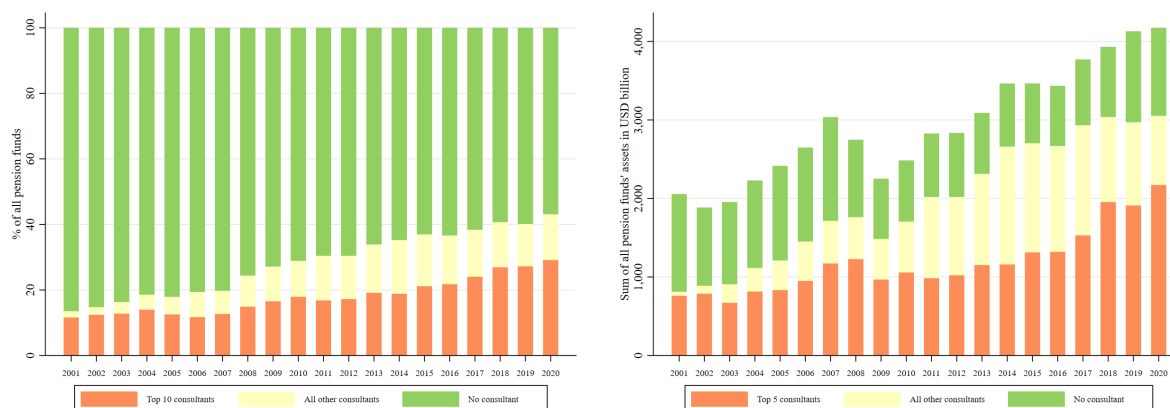
Figure 3: Concentration of Specialized Consultants in Alternative Assets

This figure replicates Figure 2 for specialized consultants. When we compute the percentages of pension funds by asset under management we account for the fact that there can be more than one specialized consultants per asset class. For example, if a pension fund has two real assets consultants, each one of them is assumed to advise half of the total assets of the pension fund.

Panel A: Real Assets



Panel B: Private Equity



Panel C: Hedge Funds

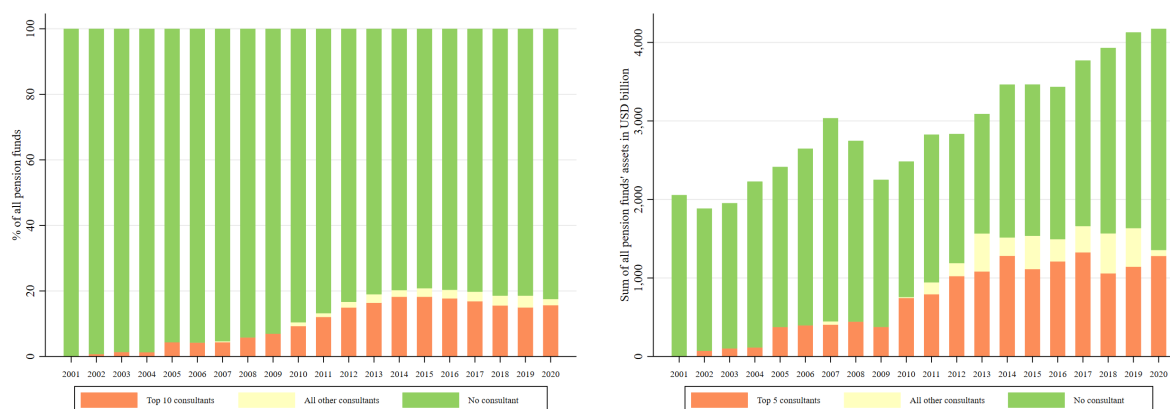
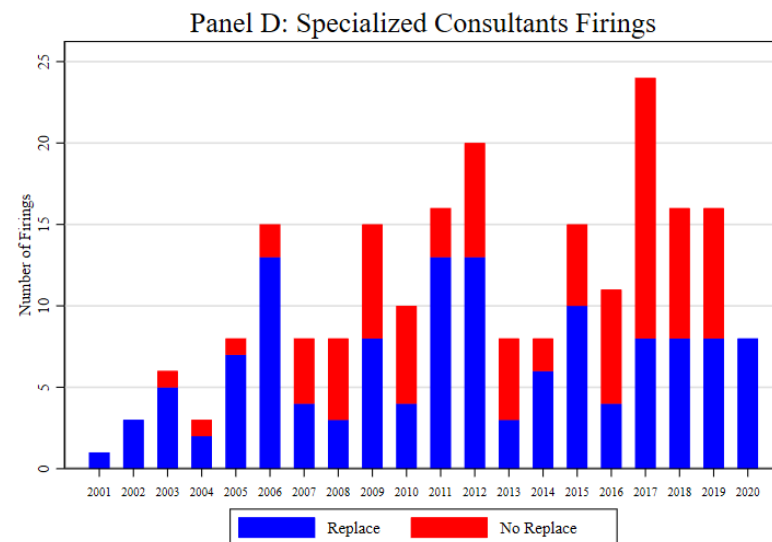
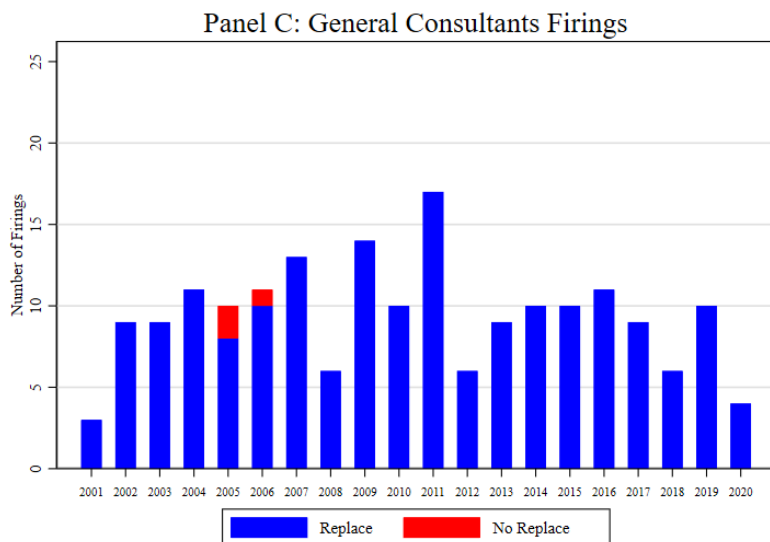
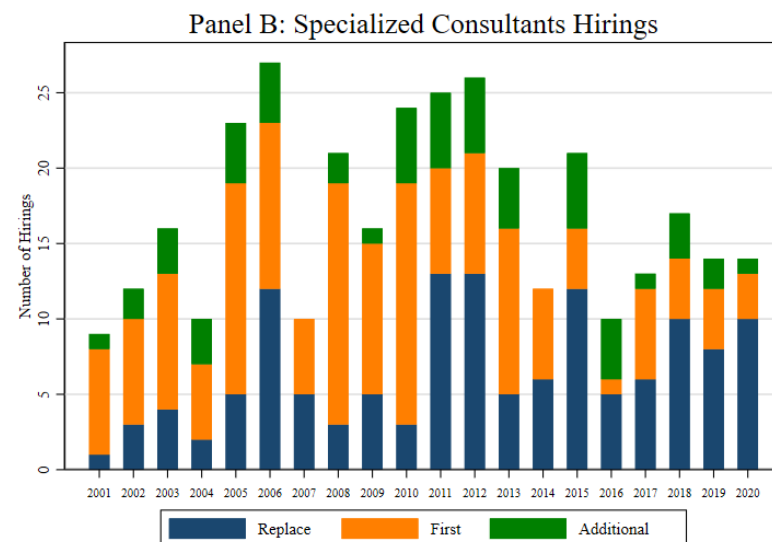
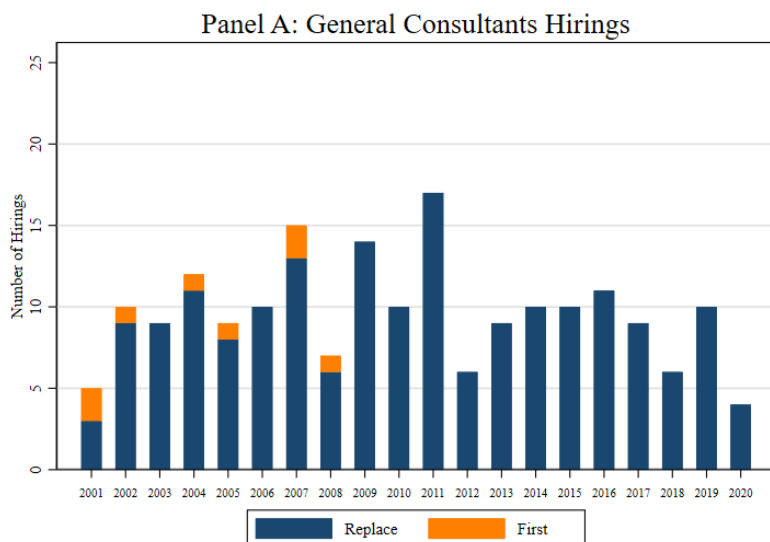


Figure 4: Turnover of Consultants over Time

Panel A and B shows the hiring events for general and specialized consultants. A replacement is a hiring following the termination of the incumbent consultant. A replacement must occur within one year since termination. If there are two years or more in between firing with replacement and hiring with replacement, the event is categorized as a long replacement. Long replacements are not shown in this Figure. Panel C and D show the firing events. In order to show the round trips of consultants, we plot the lagged value of the firing with replacement.



Definition of Variables

Variable Name	Definition
Assets (\$ bil)	Total pension fund assets as reported in the Public Plans Database (PPD)
Net investment income	Change in investments, dividends, and income from each asset class minus expenses
Return	Pension fund annual return defined as $Netinvestmentincome_t / PlanAssets_{t-1}$
3Y Return	Geometric average return of a pension fund over the previous 3 years. $Geom.avg.3-yearreturn_t = ((1 + Return_{t-1} * 1 + Return_{t-2} * 1 + Return_{t-3})^{1/3}) - 1$
Plan Return (rank)	Percentile of pension fund based on the average performance over the past three years. Pension funds are sorted every year and within each reporting group from the worst to best by their geometric average return over the three previous years. The ranking variable is then standardized by the total number of pension fund within each reporting group every year in such a way to be bounded between zero and one where one is assigned by definition to the pension fund with the best past performance.
Low 3Y Return	Percentile of pension funds with the geometric average three year return below median. This variable is defined as follows: $Low\ 3year\ return_t = min(Rank\ Geom.avg.\ 3year\ return_t, 0.5)$
High 3Y Return	Percentile of pension funds with the geometric average three year return above median. This variable is defined as follows: $High\ 3year\ return_t = max(Rank\ Geom.avg.\ 3year\ return_t - 0.5, 0)$
Gap (Asset Class)	The difference between the target and the actual allocation, that is $\Delta_{Target(t-1)-Actual(t-1)}$

Table 1: Summary Statistics: Pension Fund Level

This table summarizes the characteristics of our sample of 168 public pension funds from 2001 to 2020. Panel A shows information on pension funds' size, performance, target asset allocation, and board composition. *Assets* is the total pension fund assets under management in \$bln. *Return* is pension fund annual return calculated as net investment income divided with the total assets at the beginning of the year. *3Y Return* is the geometric average returns of pension fund over the previous 3 years. *%Equity*, *%Fixed Income*, *%Real Assets*, *%Private Equity*, *%Hedge Funds*, *%Other Alternatives*, and *%Cash* measure the lagged target asset allocation. *Internal Mandate* is an indicator for pension funds with internal asset management divisions. *%State Political* captures the percentage of appointed or ex officio board members who are state officials. *%Elected Participants* captures the percentage of board members ex officio union representatives or elected by plan participants. *Investment Board* is an indicator for pension funds that have a separate investment board. Panel B presents information on the number of pension fund-consultants relations by pension fund. *#Consultants* reports the statistics for the total number of consultants by pension fund. We also report separately the statistics for general, real assets, private equity, hedge funds, and other investment consultants.

	Obs	Mean	StDev	p25	p50	p75
Panel A: Pension Fund Performance and Target Asset Allocation						
Assets (\$ bil)	3,070	19.08	34.50	2.01	6.53	20.08
Return	3,072	0.06	0.10	0.01	0.08	0.14
3Y Return	2,642	0.06	0.05	0.04	0.08	0.10
%Equity	2,789	0.51	0.10	0.45	0.52	0.60
%Fixed Income	2,789	0.26	0.07	0.21	0.26	0.30
%Real Assets	2,789	0.09	0.06	0.05	0.10	0.13
%Private Equity	2,789	0.06	0.06	0.00	0.05	0.10
%Hedge Funds	2,789	0.05	0.07	0.00	0.00	0.08
%Other Alternatives	2,789	0.02	0.05	0.00	0.00	0.00
%Cash	2,789	0.00	0.03	0.00	0.00	0.01
Internal Mandate	3,293	0.11	0.31	0.00	0.00	0.00
%State Political	3,188	0.27	0.22	0.13	0.22	0.40
%Elected Participants	3,188	0.35	0.25	0.00	0.43	0.50
Investment Board	3,194	0.11	0.32	0.00	0.00	0.00
Panel B: The Number of Investment Consultants by Pension Fund						
#Consultants	3,293	1.93	1.49	1.00	1.00	3.00
#General Consultants	3,293	0.95	0.22	1.00	1.00	1.00
#Real Assets Consultants	3,293	0.37	0.60	0.00	0.00	1.00
#Private Equity Consultants	3,293	0.34	0.59	0.00	0.00	1.00
#Hedge Fund Consultants	3,293	0.12	0.33	0.00	0.00	0.00
#Other Consultants	3,293	0.16	0.53	0.00	0.00	0.00

Table 2: Summary Statistics: Investment Consultant Level

This table summarizes the data at the investment consultant level. Panel A reports the number of unique consultants by type, the number of pension fund-consultant-year observations, and the number of observations for pension funds without a consultant. Panel B reports statistics on general investment consultants merged with the SEC ADV Form. *#Clients* is the total number of clients served by the general consultant. *%Discretionary AUM* measures the percentage of assets managed by the consultant under discretionary mandates. *Legal Issue* is an indicator for consultants reporting legal issues in the ADV annual form. *PF Clients 11-25%*, *PF Clients 26-50%*, *PF Clients 51-75%*, *PF Clients >75%* are indicators for consultants whose pension fund clients account for 0-10%, 11-25%, 26-50%, 51-75% or >75% of the total amount of assets under advisory. *%PF Clients Same Size* and *%PF Clients Same State* are based on our sample of pension fund-consultant relations. *%PF Clients Same Size* is the percentage of pension funds served by the consultant that belong to the same size quartile as the pension fund making the hiring decision. *%PF Clients Same State* is the percentage of pension funds served by the consultant that are located in the same state as the pension fund making the hiring decision.

Panel A: Investment Consultants						
	#Unique	Obs Cons	Obs None			
Consultants	151	14,027	7,655			
General Consultants	59	3,293	169			
Real Assets Consultants	45	3,435	2,216			
Private Equity Consultants	44	3,456	2,351			
Hedge Funds Consultants	19	3,304	2,919			
Other Consultants	42	539	0			
Panel B: General Consultants Assets and Clients						
	Obs	Mean	StDev	p25	p50	p75
# Clients	453	29,077	19,7948	5	176	376
Discretionary AUM	453	0.61	0.44	0.03	0.89	1.00
Legal Issues	453	0.29	0.45	0.00	0.00	1.00
PF Clients 0-10%	453	0.23	0.42	0.00	0.00	0.00
PF Clients 11-25%	453	0.15	0.36	0.00	0.00	0.00
PF Clients 26-50%	453	0.23	0.42	0.00	0.00	0.00
PF Clients 51-75%	453	0.19	0.39	0.00	0.00	0.00
PF Clients >75%	453	0.20	0.40	0.00	0.00	0.00
%PF Clients Same Size	453	0.14	0.14	0.00	0.15	0.24
%PF Clients Same State	453	0.04	0.07	0.00	0.00	0.06

Table 3: Which Pension Funds Have More Consultants

In this table, observations are at the pension fund-year level. In Columns (1) and (2), the dependent variable is the total number of general and specialized investment consultants hired by a pension fund. In Column (3), the dependent variable is the total number of specialized consultants only. Columns (4) - (6) present the results of logit specifications where the dependent variable equals to one if a pension fund has a specialized consultant in real assets, private equity, and hedge funds. We report the marginal effects at the means of the independent variables. *Fund Size* is the natural logarithm of total pension fund assets under management. *Internal Mandate* is an indicator for pension funds with internal asset management divisions. *%Equity*, *%Real Assets*, *%Private Equity*, *%Hedge Funds*, and *%Other Alternatives* measure the lagged target asset allocation. *Gap* variables capture the difference between the lagged target and actual allocation in each risky asset class. *%State Political* captures the percentage of appointed or ex officio board members who are state officials. *%Elected Participants* captures the percentage of board members ex officio union representatives or elected by plan participants. *Investment Board* is an indicator for pension funds that have a separate investment board. The specifications include year-reporting-month fixed effects. We cluster standard errors by pension fund, and report standard errors in brackets. * $p < .10$; ** $p < .05$; *** $p < .01$.

	#Consultants			Real Assets	Private Equity	Hedge Funds
	All (1)	All (2)	Specialized (3)	(4)	(5)	(6)
Fund Size	0.551*** [0.066]	0.550*** [0.067]	0.486*** [0.057]	0.247*** [0.032]	0.208*** [0.029]	0.060*** [0.013]
Internal Mandate	0.273 [0.327]	0.274 [0.327]	0.096 [0.279]	-0.118 [0.092]	-0.080 [0.067]	-0.072*** [0.019]
%Equity _{<i>t</i> - 1}	-0.027 [0.879]	0.254 [0.909]	-0.169 [0.755]			
%Real Assets _{<i>t</i> - 1}	5.187*** [1.334]	5.398*** [1.410]	4.073*** [1.089]	3.564*** [0.605]		
%Private Equity _{<i>t</i> - 1}	4.593** [2.277]	4.905** [2.381]	2.472** [1.234]		1.766*** [0.644]	
%Hedge Funds _{<i>t</i> - 1}	0.468 [1.254]	0.634 [1.329]	0.977 [1.069]			0.612*** [0.232]
%Other Alternatives _{<i>t</i> - 1}	0.460 [1.297]	0.760 [1.352]	-0.383 [1.126]	-1.800 [1.172]	-0.026 [0.859]	-0.231 [0.380]
Gap Equity _{<i>t</i> - 1}		-1.495* [0.850]	-0.678 [0.696]			
Gap Real Assets _{<i>t</i> - 1}		-0.744 [1.564]	-0.698 [1.308]	-0.561 [0.838]		
Gap Private Equity _{<i>t</i> - 1}		-1.409 [1.478]	-0.177 [1.285]		0.387 [0.712]	
Gap Hedge Funds _{<i>t</i> - 1}		-0.303 [1.839]	-0.264 [1.570]			-0.259 [0.250]
Gap Other Alternatives _{<i>t</i> - 1}		-1.301 [1.600]	-1.468 [1.600]	0.132 [1.683]	-0.995 [0.794]	-0.132 [0.386]
%State Political	0.833** [0.341]	0.832** [0.339]	0.534 [0.324]	0.181 [0.138]	0.108 [0.148]	0.061 [0.051]
%Elected Participants	0.140 [0.299]	0.126 [0.294]	0.064 [0.269]	0.068 [0.155]	0.031 [0.145]	-0.002 [0.057]
Investment Board	0.062 [0.303]	0.061 [0.301]	-0.136 [0.202]	-0.002 [0.100]	-0.067 [0.081]	-0.006 [0.037]
Year × Reporting Month FE	Yes	Yes	Yes	Yes	Yes	Yes
Observations	2,490	2,487	2,487	2,487	2,487	2,118
Adjusted R-squared	0.457	0.458	0.469			

Table 4: Number of consultants hired and fired by type

The table shows the number of consultants hired and fired by type, from 2001 to 2020. *Hire First* refers to the first time hiring of a general or specialized consultant by a pension fund. *Hire Addition* refers to the hiring of an additional specialized consultant in one asset class for which at least one consultant was already employed in the previous year(s). *Hire Replace* refers to the hiring of a consultant subsequent to the firing of one consultant in the same asset class, or replacement of the general consultant. An event is categorized as *Hire Replace* if the replacement occurs in the year after the incumbent consultant was dismissed. *Hire Long Replacement* refers to the hiring as replacement of a consultant in the same asset class, or replacement of a general consultant where the position of the incumbent consultant remains vacant for more than two years before the actual replacement occurs. *Firing with replacement* refers to a consultant being discontinued in a given year and then replaced in the next year(s). *Firing with no replacement* refers to a discontinuation of a consultant without hiring of a new one for that specific asset class.

	Hire					Fire			
	First	Addition	Replace	Long Replace	Total	Replace	Long Replace	No Replace	Total
General	8	-	185	1	194	183	1	3	187
Hedge Funds	43	5	11	1	60	11	1	18	30
Private Equity	62	26	66	6	160	65	4	24	93
Real Estate	49	24	54	9	136	54	5	46	105
Total	162	55	316	17	550	313	11	91	415

Table 5: Hiring General Investment Consultants

In this table, observations are at the pension fund-year level. We present the results of logit specifications where the dependent variable equals to one if a pension fund hires a general investment consultant. We report the marginal effects at the means of the independent variables. *3Y Return* and *5Y Return* are the geometric average returns of pension fund over the previous 3 or 5 years. *3Y Rank* and *5Y Rank* measure the percentile ranking of pension fund based on the average performance over the past 3 or 5 years. *Low 3Y Rank* and *Low 5Y Rank* capture the percentile ranking of pension funds with below median average return over the past 3 or 5 years. *High 3Y Rank* and *High 5Y Rank* capture the percentile ranking of pension funds with above median average return over the past 3 or 5 years. The specifications include controls for pension fund assets under management, internal asset management divisions, and governance. We also control for the lagged target allocation as well as the difference between the lagged target and actual allocation in each risky asset class. The specifications include year-reporting-month fixed effects. We cluster standard errors by pension fund, and report standard errors in brackets. $p < .10$; $**p < .05$; $***p < .01$.

	(1)	(2)	(3)	(4)	(5)	(6)
3Y Return	-0.882*** [0.308]					
5Y Return		-1.220*** [0.367]				
3Y Rank			-0.057*** [0.016]			
5Y Rank				-0.065*** [0.016]		
Low 3Y Rank					-0.122*** [0.036]	
High 3Y Rank					0.013 [0.037]	
Low 5Y Rank						-0.116*** [0.032]
High 5Y Rank						-0.009 [0.037]
Fund Size	0.012*** [0.003]	0.011*** [0.003]	0.012*** [0.003]	0.012*** [0.003]	0.013*** [0.003]	0.012*** [0.003]
Internal Mandate	-0.037*** [0.008]	-0.039*** [0.008]	-0.036*** [0.008]	-0.038*** [0.008]	-0.037*** [0.007]	-0.039*** [0.008]
%State Political	-0.024 [0.018]	-0.005 [0.018]	-0.025 [0.017]	-0.006 [0.018]	-0.029 [0.017]	-0.009 [0.018]
%Elected Participants	0.015 [0.017]	0.030* [0.018]	0.014 [0.017]	0.028 [0.017]	0.014 [0.017]	0.027 [0.017]
Investment Board = 1	0.003 [0.011]	0.001 [0.013]	0.003 [0.011]	0.001 [0.012]	0.002 [0.011]	0.000 [0.012]
Target Asset Allocation	Yes	Yes	Yes	Yes	Yes	Yes
Gap Asset Allocation	Yes	Yes	Yes	Yes	Yes	Yes
Year \times Reporting Month FE	Yes	Yes	Yes	Yes	Yes	Yes
Observations	2,227	1,983	2,227	1,983	2,227	1,983

Table 6: Firing General Investment Consultants

In this table, observations are at the pension fund-year level. We present the results of logit specifications where the dependent variable equals to one if a pension fund fires a general investment consultant. We report the marginal effects at the means of the independent variables. *3Y Return* and *5Y Return* are the geometric average returns of pension fund over the previous 3 or 5 years. *3Y Rank* and *5Y Rank* measure the percentile ranking of pension fund based on the average performance over the past 3 or 5 years. *Low 3Y Rank* and *Low 5Y Rank* capture the percentile ranking of pension funds with below median average return over the past 3 or 5 years. *High 3Y Rank* and *High 5Y Rank* capture the percentile ranking of pension funds with above median average return over the past 3 or 5 years. The specifications include controls for pension fund assets under management, internal asset management divisions, and governance. We also control for the lagged target allocation as well as the difference between the lagged target and actual allocation in each risky asset class. The specifications include year-reporting-month fixed effects. We cluster standard errors by pension fund, and report standard errors in brackets. $p < .10$; $**p < .05$; $***p < .01$.

	(1)	(2)	(3)	(4)	(5)	(6)
3Y Return	-0.685** [0.328]					
5Y Return		-0.889** [0.414]				
3Y Rank			-0.050*** [0.017]			
5Y Rank				-0.059*** [0.017]		
Low 3Y Rank					-0.114*** [0.039]	
High 3Y Rank					0.018 [0.039]	
Low 5Y Rank						-0.109*** [0.034]
High 5Y Rank						-0.002 [0.040]
Fund Size	0.011*** [0.003]	0.010*** [0.003]	0.011*** [0.003]	0.011*** [0.003]	0.012*** [0.003]	0.011*** [0.003]
Internal Mandate	-0.037*** [0.008]	-0.039*** [0.009]	-0.036*** [0.008]	-0.038*** [0.009]	-0.037*** [0.008]	-0.039*** [0.009]
%State Political	-0.038* [0.021]	-0.022 [0.022]	-0.039* [0.020]	-0.023 [0.022]	-0.042** [0.021]	-0.025 [0.022]
%Elected Participants	0.014 [0.018]	0.029 [0.019]	0.014 [0.018]	0.027 [0.018]	0.014 [0.017]	0.026 [0.018]
Investment Board	0.001 [0.012]	0.001 [0.014]	0.001 [0.012]	0.001 [0.013]	0.001 [0.012]	0.001 [0.013]
Target Asset Allocation	Yes	Yes	Yes	Yes	Yes	Yes
Gap Asset Allocation	Yes	Yes	Yes	Yes	Yes	Yes
Year \times Reporting Month FE	Yes	Yes	Yes	Yes	Yes	Yes
Observations	2,133	1,897	2,133	1,897	2,133	1,897

Table 7: Selection of General Consultants

In this table, observations are at the consultant-year level and the sample period is 2010-2020. Our analysis is based on 95 hiring events of general investment consultants by 86 pension funds. For every hiring event, we construct an opportunity set of general investment consultants that could have been hired. The opportunity set includes all 48 general investment consultants that were employed by at least one pension funds during the sample period. We present the results of logit specifications where the dependent variable equals to one for the general investment consultant that was actually hired. We report the marginal effects at the means of the independent variables. *LogClients* is the natural logarithm of the total number of clients served by the investment consultant. *%Discretionary AUM* measures the percentage of assets managed by the consultant under discretionary mandates. *%PF Clients Same Size* is the percentage of pension funds served by the consultant that belong to the same size quartile as the pension fund making the hiring decision. *%PF Clients Same State* is the percentage of pension funds served by the consultant that are located in the same state as the pension fund making the hiring decision. *Legal Issue* is an indicator for investment consultants reporting legal issues in the ADV annual form. *PF Clients 11-25%*, *PF Clients 26-50%*, *PF Clients 51-75%*, *PF Clients >75%* are indicators for investment consultants whose pension fund clients account for 11-25%, 26-50%, 51-75% or >75% of the total amount of assets under advisory (the omitted category is 0-10%). The specifications include pension fund and year-reporting-month fixed effects. We cluster standard errors by pension fund, and report standard errors in brackets. $p < .10$; $**p < .05$; $***p < .01$.

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Log Clients	0.003*** [0.000]	0.003*** [0.000]	0.003*** [0.000]	0.003*** [0.000]	0.003*** [0.000]	0.003*** [0.000]	0.003*** [0.000]
Discretionary AUM	0.016*** [0.005]	0.014*** [0.005]	0.013** [0.005]	0.011** [0.005]	0.016*** [0.005]	0.012*** [0.004]	0.009** [0.004]
%PF Clients Same Size		0.025*** [0.003]		0.022*** [0.003]			0.018*** [0.003]
%PF Clients Same State			0.043*** [0.006]	0.037*** [0.006]			0.032*** [0.006]
Legal Issues					-0.010** [0.005]		-0.001 [0.004]
PF Clients 11-25%						0.003 [0.009]	0.000 [0.008]
PF Clients 26-50%						0.016*** [0.006]	0.012** [0.005]
PF Clients 51-75%						0.025*** [0.006]	0.021*** [0.005]
PF Clients >75%						0.004 [0.008]	0.004 [0.007]
Year FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Pension Fund FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	3,986	3,986	3,986	3,986	3,986	3,986	3,986

Table 8: Hiring Specialized Investment Consultants

In this table, observations are at the pension fund-year level. The analysis focuses on specialized consultants in real assets, private equity or hedge funds. We present the results of logit specifications and report the marginal effects at the means of the independent variables. In Columns (1)-(3), the dependent variable equals to one if a pension fund hires a specialized investment consultant in real assets, private equity or hedge funds. In Columns (4)-(6), the dependent variable equals to one if a pension fund hires a new specialized investment consultant as a replacement for the fired specialized consultant. In Columns (7)-(9), the dependent variable equals to one if a pension fund hires for the first time a specialized investment consultant in real assets, private equity or hedge funds. *%Target* and *%Actual* measure the lagged target and actual allocation in each alternative asset class. *Gap Allocation* captures the difference between the lagged target and actual allocation. *Change Target* equals the difference between the target allocation in $t - 1$ and $t - 2$ in real assets, private equity or hedge funds. *PE Consultant* and *HF Consultant* are indicators for specialized consultants in private equity and hedge funds (the omitted category is real assets). We also control for pension fund assets under management, internal asset management divisions, and governance. The specifications include year-reporting-month fixed effects. We cluster standard errors by pension fund, and report standard errors in brackets. $p < .10$; $**p < .05$; $***p < .01$.

	All Hirings			Replacement Hirings			First-Time Hirings		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
%Target $t - 1$	0.051*	0.080***		0.035	0.093		0.066***	0.070**	
	[0.030]	[0.030]		[0.081]	[0.080]		[0.024]	[0.028]	
%Actual $t - 1$			0.051*			0.035			0.066***
			[0.030]			[0.081]			[0.024]
Gap Allocation	0.115*		0.166***	0.045		0.080	0.113*		0.179***
	[0.062]		[0.058]	[0.148]		[0.160]	[0.058]		[0.058]
Change Target		-0.015			-0.471**			0.081	
		[0.083]			[0.201]			[0.056]	
Fund Size	0.013***	0.014***	0.013***	0.010*	0.010**	0.010*	0.011***	0.011***	0.011***
	[0.002]	[0.002]	[0.002]	[0.005]	[0.005]	[0.005]	[0.002]	[0.002]	[0.002]
Internal Mandate	-0.009*	-0.011**	-0.009*	-0.014	-0.015	-0.014	-0.009***	-0.010***	-0.009***
	[0.005]	[0.005]	[0.005]	[0.012]	[0.011]	[0.012]	[0.003]	[0.003]	[0.003]
HF consultant	-0.015***	-0.015***	-0.015***	-0.020	-0.018	-0.020	-0.008***	-0.009***	-0.008***
	[0.004]	[0.004]	[0.004]	[0.012]	[0.012]	[0.012]	[0.003]	[0.003]	[0.003]
PE consultant	0.006*	0.006*	0.006*	0.015	0.014	0.015	0.004	0.005*	0.004
	[0.003]	[0.003]	[0.003]	[0.009]	[0.009]	[0.009]	[0.003]	[0.003]	[0.003]
%State Political	0.001	0.002	0.001	0.003	0.006	0.003	0.009	0.011	0.009
	[0.009]	[0.010]	[0.009]	[0.030]	[0.031]	[0.030]	[0.008]	[0.009]	[0.008]
%Elected Participants	0.001	0.001	0.001	0.020	0.024	0.020	-0.003	-0.003	-0.003
	[0.008]	[0.009]	[0.008]	[0.021]	[0.022]	[0.021]	[0.007]	[0.007]	[0.007]
Investment Board	-0.002	-0.003	-0.002	0.007	0.007	0.007	-0.006	-0.008*	-0.006
	[0.006]	[0.006]	[0.006]	[0.014]	[0.015]	[0.014]	[0.004]	[0.004]	[0.004]
Year \times Reporting Month FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	7,364	6,906	7,364	1,977	1,911	1,977	4,405	4,201	4,405

Table 9: Changes in Target Asset Allocation and Consultants Turnover

In this table, observations are at the pension fund-year level. In Panel A, the dependent variable is the difference between the target allocation in t and $t - 1$ in equity, real assets, private equity or hedge funds. In Panel B, the dependent variable is the absolute change in the target allocation between t and $t-1$ in each asset class. *Consultant Hiring Event* is an indicator equal to one if a pension fund hired a new general investment consultant in year $t-1$. The specifications include lagged controls for pension fund assets under management, internal asset management divisions, and governance. All specifications include year-reporting-month fixed effects. In Columns (2), (4), (6) and (8), we include also pension fund fixed effects. We cluster standard errors by pension fund, and report standard errors in brackets. $p < .10$; $**p < .05$; $***p < .01$.

	Equity		Real Assets		Private Equity		Hedge Funds	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Panel A: Changes in Target Asset Allocation								
Consultant Hiring Event	-0.007 [0.004]	-0.007 [0.005]	-0.002 [0.003]	-0.002 [0.003]	0.003 [0.002]	0.003 [0.002]	0.003 [0.003]	0.003 [0.003]
Fund Size	-0.000 [0.000]	-0.011 [0.008]	-0.000 [0.000]	0.009* [0.005]	-0.000* [0.000]	0.002 [0.004]	0.001* [0.000]	0.010** [0.005]
Internal Mandate	-0.004* [0.002]		0.001 [0.001]		0.001 [0.001]		-0.001 [0.001]	
%State Political	-0.002 [0.002]		0.001 [0.002]		-0.003** [0.001]		0.001 [0.002]	
%Elected Participants	-0.002 [0.002]		-0.000 [0.001]		-0.002 [0.002]		-0.001 [0.002]	
Investment Board	0.001 [0.001]		-0.001 [0.001]		-0.001 [0.001]		-0.003** [0.001]	
Year \times Reporting Month FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Pension Fund FE	No	Yes	No	Yes	No	Yes	No	Yes
Observations	2,561	2,589	2,561	2,589	2,561	2,589	2,561	2,589
Adjusted R-squared	0.035	0.011	0.008	-0.020	-0.002	-0.028	0.022	-0.016
Panel B: Absolute Changes in Target Asset Allocation								
Consultant Hiring Event	0.011*** [0.004]	0.008** [0.004]	0.008*** [0.002]	0.006*** [0.002]	0.005** [0.002]	0.003* [0.002]	0.010*** [0.003]	0.008*** [0.003]
Fund Size	-0.000 [0.001]	-0.004 [0.006]	-0.001** [0.000]	-0.004 [0.005]	-0.001* [0.000]	0.000 [0.003]	-0.000 [0.001]	0.001 [0.004]
Internal Mandate	-0.001 [0.003]		0.000 [0.002]		0.001 [0.002]		0.001 [0.002]	
%State Political	0.002 [0.004]		-0.002 [0.002]		-0.001 [0.002]		-0.003 [0.004]	
%Elected Participants	-0.003 [0.004]		-0.001 [0.002]		-0.002 [0.002]		-0.003 [0.004]	
Investment Board	-0.004* [0.002]		-0.001 [0.001]		-0.001 [0.001]		-0.001 [0.002]	
Year \times Reporting Month FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Pension Fund FE	No	Yes	No	Yes	No	Yes	No	Yes
Observations	2,561	2,589	2,561	2,589	2,561	2,589	2,561	2,589
Adjusted R-squared	0.017	0.053	0.012	0.046	0.006	0.030	0.017	0.112

Table 10: Specialized Consultants and Access to Private Funds

In this table, observations are at the pension fund-investment level over the 2001–2020 period. Columns (1) to (4) presents the results of logit specifications where the dependent variable equals to one if a private fund is the first fund raised by the general partner based on all funds raised by this general partner. We report the marginal effects at the means of the independent variables. Columns (5) to (8) presents the results of logit specifications where the dependent variable equals to one if a private fund is the first fund raised by the general partner within the specific series of funds raised by this general partner. We report the marginal effects at the means of the independent variables. Columns (9) to (12) present results of regressions in which the dependent variable captures the ratio of final private fund size relative to the target fund size. We winsorize the ratio at the 1.00% level. *PE Consultant* and *RA Consultant* are indicators for pension funds that have a specialized consultant in private equity and real assets. We also control for pension fund assets under management, internal asset management divisions, governance, and target allocation to risky assets. The specifications include vintage year, private fund type, and pension fund fixed effects. We cluster standard errors by pension fund, and report standard errors in brackets. $p < .10$; $**p < .05$; $***p < .01$.

	Overall First Time Fund				Series First Time Fund				Private Fund Size / Target Size			
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
PE Consultant	0.003 [0.008]	0.002 [0.008]	0.004 [0.008]	0.004 [0.010]	0.001 [0.011]	0.000 [0.011]	0.001 [0.010]	0.011 [0.012]	0.021*** [0.007]	0.019*** [0.007]	0.018*** [0.006]	0.028*** [0.009]
RA Consultant	0.011 [0.007]	0.011 [0.007]	0.011 [0.007]	-0.023** [0.010]	0.002 [0.011]	0.003 [0.011]	0.002 [0.010]	-0.034*** [0.013]	-0.000 [0.007]	0.000 [0.007]	-0.000 [0.007]	0.006 [0.009]
Pension Fund Size	-0.001 [0.005]	0.001 [0.005]	0.000 [0.005]	0.017 [0.027]	0.001 [0.006]	0.004 [0.006]	0.004 [0.006]	-0.005 [0.034]	-0.001 [0.003]	0.001 [0.003]	0.001 [0.003]	0.004 [0.019]
Internal Mandate	0.012 [0.013]	0.009 [0.012]	0.009 [0.012]	0.009 [0.016]	0.024 [0.016]	0.021 [0.014]	0.019 [0.015]	0.029 [0.020]	-0.001 [0.007]	-0.005 [0.008]	-0.006 [0.008]	-0.010 [0.012]
Investment Board	-0.011 [0.009]	-0.009 [0.009]	-0.010 [0.009]		-0.020 [0.013]	-0.016 [0.012]	-0.018 [0.012]		0.006 [0.008]	0.004 [0.008]	0.003 [0.008]	
State-political	0.048*** [0.015]	0.042*** [0.014]	0.041*** [0.014]	-0.043 [0.068]	0.068*** [0.024]	0.059*** [0.022]	0.057*** [0.022]	0.046 [0.076]	-0.012 [0.012]	-0.016 [0.012]	-0.014 [0.012]	0.054 [0.128]
Participant-elected	0.025 [0.019]	0.022 [0.019]	0.021 [0.020]	0.059 [0.042]	0.025 [0.026]	0.021 [0.025]	0.014 [0.026]	0.082* [0.047]	0.006 [0.012]	0.006 [0.012]	0.004 [0.011]	-0.099** [0.046]
%Real Assets	-0.073 [0.070]	-0.086 [0.068]	-0.096 [0.067]	-0.219*** [0.077]	0.051 [0.098]	0.028 [0.092]	0.014 [0.087]	-0.156 [0.112]	-0.082 [0.061]	-0.080 [0.059]	-0.065 [0.058]	0.017 [0.070]
%Private Equity	-0.065 [0.080]	-0.061 [0.078]	-0.066 [0.077]	-0.005 [0.083]	-0.078 [0.109]	-0.064 [0.108]	-0.103 [0.102]	-0.133 [0.128]	-0.050 [0.052]	-0.015 [0.049]	-0.015 [0.048]	-0.097 [0.077]
%Other Alternatives	-0.016 [0.087]	-0.034 [0.087]	-0.049 [0.086]	0.021 [0.100]	0.018 [0.094]	-0.003 [0.096]	-0.029 [0.091]	0.038 [0.120]	-0.071 [0.052]	-0.061 [0.051]	-0.058 [0.049]	-0.185*** [0.083]
Other Risky Target Allocation	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Other Board Members	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Vintage-Year FE	Yes	Yes	No	No	Yes	Yes	No	No	Yes	Yes	No	No
Fund-Type FE	No	Yes	No	No	No	Yes	No	No	No	Yes	No	No
Fund-Type-Vintage-Year FE	No	No	Yes	Yes	No	No	Yes	Yes	No	No	Yes	Yes
Pension-Fund FE	No	No	No	Yes	No	No	No	Yes	No	No	No	Yes
Observations	21,710	21,710	21,662	21,226	21,708	21,708	21,698	21,520	18,773	18,773	18,773	18,773
Adjusted R-squared									0.041	0.056	0.098	0.107

Table 11: Changes in Performance and Consultants Turnover

In this table, observations are at the pension plan - event time level. The analysis focuses on the general investment consultants hired as a replacement for terminated general consultant. The replacement event is in year $t=0$, when the new consultant starts advising. We report performance statistics for the three years before the replacement event and three years after the replacement event. *Relative Return* is the difference between the cumulative return of the pension fund making the hiring decision and the average cumulative return of all other pension funds reporting performance in the same month. *Rank* is the percentile ranking of pension fund based on the average performance. *Difference* compares the performance statistics before and after the hiring event. We report standard errors in brackets. $p < .10$; $**p < .05$; $***p < .01$.

	Pre-Hiring Period				Post-Hiring Period		
	-3 to 0	-2 to 0	-1 to 0	0	0 to 1	0 to 2	0 to 3
Relative Return	-0.860*	-0.576*	0.001	0.120	0.165	-0.069	-0.204
	[0.457]	[0.311]	[0.219]	[0.222]	[0.283]	[0.312]	[0.410]
Difference					0.165	0.507	0.657
					[0.371]	[0.386]	[0.562]
Rank	0.439***	0.448***	0.485***	0.529***	0.521***	0.508***	0.501***
	[0.026]	[0.023]	[0.023]	[0.022]	[0.021]	[0.022]	[0.024]
Difference					0.037	0.060**	0.062*
					[0.031]	[0.029]	[0.034]
Observations	134	148	161	165	161	148	134

Table 12: Specialized Consultants and Performance in Alternative Assets

In this table, observations are at the pension fund-investment level over the 2001–2016 period. In columns (1) to (4) performance is measured using the net internal rate of return (IRR), whereas in columns (4) to (6) performance is measured using multiple of invested capital. *PE Consultant* and *RA Consultant* are indicators for pension funds that have a specialized consultant in private equity and real assets. We also control for pension fund assets under management, internal asset management divisions, governance, and target allocation to risky assets. The specifications include vintage year, private fund type, and pension fund fixed effects. We cluster standard errors by pension fund, and report standard errors in brackets. $p < .10$; $**p < .05$; $***p < .01$.

	Internal Rate of Return (IRR)				Multiple of Invested Capital			
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
PE Consultant	-0.128 [0.537]	-0.085 [0.467]	0.135 [0.459]	-0.475 [0.778]	-0.042 [0.036]	-0.019 [0.026]	-0.003 [0.025]	0.035 [0.030]
RA Consultant	0.586 [0.438]	0.524 [0.365]	0.336 [0.346]	0.697 [0.555]	0.004 [0.033]	-0.018 [0.022]	-0.025 [0.023]	0.013 [0.030]
Pension Fund Size	0.054 [0.228]	-0.021 [0.201]	-0.069 [0.180]	-0.848 [1.624]	0.015 [0.015]	-0.004 [0.011]	-0.008 [0.009]	-0.117* [0.067]
Internal Mandate	-0.780 [0.547]	-0.684 [0.458]	-0.506 [0.386]	-1.011 [1.145]	-0.080** [0.040]	-0.049* [0.026]	-0.028 [0.021]	0.000 [0.080]
State-political	-4.334*** [0.967]	-3.682*** [0.728]	-3.328*** [0.641]	-12.213** [6.040]	-0.227** [0.087]	-0.145** [0.057]	-0.124** [0.053]	-0.207 [0.306]
Participant-elected	-2.273** [0.967]	-1.778** [0.774]	-1.636** [0.658]	-4.207 [4.463]	-0.106 [0.078]	-0.052 [0.048]	-0.053 [0.040]	-0.165 [0.172]
Investment Board	1.786** [0.786]	1.434** [0.663]	1.470** [0.598]		0.116* [0.063]	0.106** [0.043]	0.107*** [0.038]	
%Real Assets	-5.455 [4.092]	-4.158 [3.493]	-6.268* [3.251]	-0.440 [5.468]	0.066 [0.294]	0.134 [0.219]	-0.014 [0.200]	-0.042 [0.215]
%Private Equity	-1.952 [5.076]	-3.357 [4.704]	-7.564* [4.099]	-0.286 [5.859]	0.438 [0.411]	0.190 [0.326]	-0.012 [0.282]	-0.721* [0.402]
%Other Alternatives	-4.954 [3.803]	-3.570 [3.420]	-5.611* [2.994]	3.711 [4.926]	-0.362 [0.269]	-0.289 [0.208]	-0.364* [0.188]	-0.449* [0.241]
Other Risky Target Allocation	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Other Board Members	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Vintage-Year FE	Yes	Yes	No	No	Yes	Yes	No	No
Fund-Type FE	No	Yes	No	No	No	Yes	No	No
Fund-Type-Vintage-Year FE	No	No	Yes	Yes	No	No	Yes	Yes
Pension-Fund FE	No	No	No	Yes	No	No	No	Yes
Observations	15,048	15,048	15,048	15,048	15,424	15,424	15,424	15,424
Adjusted R-squared	0.096	0.145	0.208	0.211	0.041	0.139	0.209	0.212