# Political Ideology Alignment on Supply Chain

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#### Abstract

This study examines the influence of a firm's political preference on its supply chain relationships. Following political theory's prediction that common political ideologies cluster together to form political coalitions and individuals are more inclined to cooperate with those who share their political ideology, we find a firm (supplier) sharing the same political ideologies with its potential customers is more likely to build a supply chain relationship. The firm (supplier) will provide more favorable trade credit arrangements and increase relationshipspecific innovations for customers who have the same political ideology. Such alignment can also ease the R&D investment burden by reducing the firm (supplier)'s R&D expenditures and the total number of new patents. Additionally, banks are observed to lower loan spreads for the borrower who is the supplier of the bank's client and shares the same political ideology with that client. Further, we find this political affiliation effect was particularly pronounced during the influential period of the Trump administration (2015-2021). The market reacts positively when the supply chain relationship of the focal firm and its political ideology same customer becomes public information. This research highlights the importance of political ideology in supply chain relationship management, extending beyond traditional considerations of production quality and price.

Keywords: Political Ideology, Supply Chain, Trade Credit, Innovation

JEL Classification Codes: D22, D72, G38, L14, M41

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#### 1. Introduction

Over recent decades, partisan conflict within the United States has witnessed a discernible escalation (e.g., Mason and Wronski, 2018; Boxell et al., 2017; Fos et al., 2022). This trend could hinder cross-partisan trust, creating political and economic gridlock (e.g., Brewer and Pierce, 2005; Carlin and Love, 2013). A recent illustrative example involves the movement boycotting companies that fund anti-abortion lawmakers in 2022. Ms. Magazine, a prominent publication advocating for women's rights, has called out major corporations such as Coca-Cola, General Motors, Citibank, AT&T, and Exxon for their substantial annual donations to politicians<sup>1</sup>, though some of them have provided reimbursement for abortion-related travel expenses. This movement indicates that political biases would create isolated clusters of individuals, create mistrust between customers and suppliers, and impose significant influence over business trajectories (e.g., Iyengar and Westwood, 2015; Ren et al., 2023; Dimant, 2024)<sup>2</sup>. In this study, we explore the influence of political ideology on trust dynamics within supply chain relationships. We specifically investigate whether a shared political ideology facilitates the formation of these relationships and scrutinize the implications of such ideological congruence.

To this end, we study three interconnected research questions. First, we investigate whether firms with similar political ideologies are more likely to form supply chain relationships. Group identities foster a sense of pride and self-esteem among individuals, prompting them to distinguish between those who are similar (the in-group) and those who are different (the out-group) (Druckman and Lupia, 2016), and thus foster discrimination in cooperative efforts, favoring in-group members over out-group members. This in-group bias facilitates greater trust among group members, leading to more frequent and effective cooperation within the in-group (e.g., Roccas and Brewer, 2002; Carlin and Love, 2013; Hernandez-Lagos and Minor, 2015). Hence, we predict that sharing a common political ideology can bolster trust in potential business partners within the same political group, thereby increasing the

<sup>&</sup>lt;sup>1</sup>Refer to Fight Abortion Bans by Boycotting Anti-Choice States

<sup>&</sup>lt;sup>2</sup>Another example is the U.S. student protests movement in 2024 Spring, which demands universities to divest from and sever ties with Israel. Brown University is the first institution to agree to address divestment concerns through a democratic process. Refer to Agreement between University, student leaders will end 'divestment' encampment at Brown.

likelihood of forging new supply chain relationships.

Second, since such in-group favoritism is a prevalent tendency (Carlin and Love, 2013), we examine the advantages for firms within supply chains that align ideologically. This includes assessing the effects on relationship-specific trade credit and innovations. Sharing the same political ideology could reduce the likelihood of hold-up issues<sup>3</sup>, such as misuse or exploitation of confidential information or non-payment to suppliers. This, in turn, enhances trust, promoting information sharing and collaboration in business operations (Dyer and Singh, 1998). We anticipate that the same political ideology would extend the duration of business partnerships and stimulate supplier-driven customer-specific innovation, along with more lenient trade credit policies.

Third, we investigate how third-party stakeholders perceive these relationships. Dasgupta et al. (2021) suggest that a socially connected supplier is more likely to receive preferential treatment or "protection" against the uncertainties of customer procurement practices during contract allocation or renewal. We hypothesize a similar effect for pairs with the same political ideologies. Consequently, the same political ideologies would signal a predictable future cash flow for suppliers. We explore the bank's lending response when the borrower's customer is also a bank client and market reactions to the disclosure of supply chain relationships if the firms share the same political ideology.

To address these research questions, we first obtain individual-level political contribution data from Federal Election Commission (FEC). We manually match the individual's self-reported employer with firm-level information in FactSet and Compustat databases and calculate each firm's political ideology score based on each individual employee's political contribution record. Since the conduct of firms is collectively determined by both management and rank-and-file employees (Svejnar, 1982), corporate behavior embodies the ideological orientation of the entity as a whole (Gupta et al., 2017). Thus, the values a firm upholds are mirrored in the political ideologies of its entire employees, which, in turn, could shape the firm's behaviors (Williamson, 2008). Accordingly, it is worthwhile to explore the influence

<sup>&</sup>lt;sup>3</sup>Throughout the paper, we use the term "hold-up" broadly to include any type of opportunism that could arise in a bilateral relationship from either party, including ex-post bargaining over terms of exchange and the use of sensitive and proprietary information revealed by the other party. Thus, greater cooperation in trade credit and innovation efforts can be partially attributed to hold-up mitigation.

of the overall firm's ideological alignment on decision-making processes, including supplier selection.

To answer the first question, we investigate the likelihood of firms with the same political ideologies establishing new supply chain relationships. We regress the supply chain relationship indicator (OnChain) on the political ideology match indicator (Same) and the continuous measure of political divergence (Divergence) between the focal (supplier) and potential customer firms<sup>4</sup>. Our control sample comprises non-supply chain firm pairs that are competitors of the focal firm's customers but are not customers of the focal firm themselves. This criterion allows us to more accurately emulate real-world business dynamics. Our results reveal that firms sharing the same political ideology are 0.2% more likely to become suppliers for their customers, which is a 7.1% increase relative to the unconditional matching probability. This finding holds across various fixed effects models, with the most stringent model incorporating year, supplier, and customer interactive fixed effects. Albeit the increase in likelihood appears marginal, we conducted further analyses to assess the significance of political ideology. We further explore the effects of Same and Divergence on the longevity of supply chain relationships, employing survival tests (Cox and Weibull models) to determine how the same ideologies can enlongate these partnerships. The findings align with our expectations: supply chain relationships remain stable if firms share the same political ideologies. Moreover, firms with divergent political ideologies are more prone to sever their supply chain ties in the subsequent year.

We also run cross-sectional tests based on the supplier's ROA, firm size, competition, and geographical distances between pairs of firms. Empirical tests demonstrate that geographical distance and supplier's ROA and size enhance the effect of political ideology as longer geographical distance entails a more important role in the first impression implied by political ideology, and a higher supplier's reputation magnifies the trust with similar ideologies, while higher competition is accompanied with more qualified suppliers which weakens customer's consideration on political ideology.

To address the endogenous problem that arises when a supplier strategically contributes

<sup>&</sup>lt;sup>4</sup>In this paper, "focal firm" and "supplier firm" are used synonymously.

to a political party supported by a potential customer, we employ instrumental variable (IV) analysis. We utilize the political ideology at the state level as a proxy for the firms' political leanings, i.e., state-level Same and Divergence to represent alignment or divergence between firms. The state-level political measures are not influenced by the business decisions of individual companies, which validates their use as instruments. Additionally, employees' political ideologies are likely shaped by their state's environment, including the influence of neighbors and friends, thus providing a micro-level foundation for the state-level ideologies. Our IV analysis confirms that our findings are robust to causal interpretations.

We investigate how political ideology influences the trade policies offered by suppliers (the focal firms) and supplier's innovation activities to uncover the mechanisms at play (which is our second research question). If the same political ideology fosters trust, suppliers should be more inclined to extend trade credit to customers, thereby aiding their business operations. Thus, we manually extract the detailed trade credit data from 10-K filings and find that suppliers offer more trade credit to customers when sharing the same political ideology. Conversely, trade credit is found to diminish as political divergence widens. We further analyze the supplier's total accounts receivable, with results reinforcing our hypothesis that total trade receivables increase when suppliers engage with customers of the same political ideology. Additionally, if the same political ideology indeed bolsters trust, we anticipate a positive impact on the supplier's relationship-specific innovations. The detailed nature of our innovation data enables us to devise specific measures to test this hypothesis. Specifically, we find that the patents filed by the supplier are more likely to cite their customer's patent portfolio when the pairs share the same political ideology. All the above results hold no matter we use the same political ideology indicator variable or the political divergence variable. Furthermore, these results are robust to controlling for the supplier's and customer's firmand pair-level characteristics as well as a variety of fixed effects.

The higher the citations from customers with the same political ideologies, the greater the reliance on customer innovation. Consequently, we anticipate an inverse relationship between a supplier's R&D input and that of its customers. Our additional analysis, which regresses the supplier's subsequent year's R&D on the interaction of political ideology and the customer's R&D, reveals a significant negative correlation. This outcome indicates that

the same political ideology can alleviate the R&D burden on suppliers, further supporting the notion that it fosters trust and business cooperation, leading to increased trade credit and more customized innovation by supplier firms. This illustrates how a shared political ideology can be mutually beneficial for both suppliers and customers<sup>5</sup>.

Given that the same political ideologies can foster supply chain relationships and reduce hold-up issues, thereby suggesting a stable future cash flow for suppliers, we turn our attention to how third-party stakeholders perceive such alignment and answer our third research question. Specifically, we scrutinize the bank's response, as banks, being well-informed stakeholders, possess private information about their borrowers, including their political inclinations. We explore whether bank loan spreads are adjusted when the bank extends credit to a firm whose customers are the bank's existing client and shares the same political ideology. Our findings in Table 7 indicate that banks consider such alignment positively, as evidenced by a reduction in loan spreads when suppliers share the same political ideology with their customers. Furthermore, our results are corroborated by the arguments of Dagostino et al. (2023), which posits that partisanship can influence a bank's assessment of a borrower's creditworthiness and capabilities, thereby affecting the bankers' pricing decisions.

Next, we study how the market perceives political ideologies in shaping supply chains, with a focus on the supplier's Cumulative Abnormal Return (CAR) around contract signing times (when the supply chain relationship becomes public). Although we do not find a clear overall pattern, we observe a positive market reaction in Table 8 during the Trump administration's influential period <sup>6</sup> <sup>7</sup>. A recent study by Cen et al. (2023) corroborates these varying patterns during the Trump administration by examining government contracts. The general consensus is that the Trump administration was associated with an increasing trend in political polarity in the U.S., as reported by NBC News<sup>8</sup>. Figure 1 also demonstrate such a trend by showing the sudden increase in the percentage of paired firms in the supply chain

<sup>&</sup>lt;sup>5</sup>We also observe a similar negative correlation between the supplier's subsequent year's patent count and the customer's current year's patent number in Table A.2.

<sup>&</sup>lt;sup>6</sup>Trump administration's influential period includes the election year and administration years from 2015 to 2021.

<sup>&</sup>lt;sup>7</sup>We also test the change of supplier's Tobin's Q at the same time, and find the same positive effect during Trump Administration period in Table A.4.

<sup>&</sup>lt;sup>8</sup>See NBC report, What's Driving America's Increasing Political Polarization.

that share the same political ideology and the decrease of the political divergences during the Trump administration's influential period. It is unclear whether Trump directly caused this trend or was simply a reflection of broader societal shifts. Regardless, it is not surprising that the market reacted differently to political ideology alignment in the supply chain during this period.

This paper contributes to the expanding body of literature investigating the relationship between political partisanship and economic behavior. Most existing studies predominantly focus on individual decisions, such as households' investment choices (Gerber and Huber, 2009; McGrath et al., 2017; Gillitzer and Prasad, 2018; Mian et al., 2023), real estate decisions (McCartney and Zhang, 2019), and portfolio allocations (Addoum and Kumar, 2016; Bonaparte et al., 2017; Meeuwis et al., 2022; Giglio et al., 2021), as well as on sophisticated individuals such as credit analysts (Kempf and Tsoutsoura, 2021), loan officers (Dagostino et al., 2023), entrepreneurs (Engelberg et al., 2022), mutual fund managers (Cassidy and Vorsatz, 2021), and judges (Huang et al., 2021; Gormley et al., 2022). Until recent, studies start to explore the effects of partisanship on firms directly. Duchin et al. (2023) and Rice (2021) offer insights into this area, albeit primarily focusing on unilateral political views and their impact on economic behavior. Specifically, Duchin et al. (2023) analyzes bilateral corporate decisions between acquirer and merger. We extend this line of inquiry by demonstrating that partisanship not only affects firms' behavior in capital markets but also in the production market. Our study specifically examines the dynamics of supply chain relationships, with a focus on the impacts from operational-level employees rather than top executives. To our knowledge, this study represents the first attempt to document the effects of increased political polarization among U.S. firms in supply chain and explore its implications for the value of supply chain relationships.

Next, our study adds to the existing literature on the economics and finance of the supply chain by investigating how pairwise political ideology between suppliers and customers influences trade policies and relationship-specific innovation. Close relationships between customers and suppliers serve as an alternative to vertical integration, effectively reducing agency and transaction costs (Coase, 1937; Granovetter, 1985; Williamson, 1979; Cen et al., 2017). While prior research has explored how frictions in these inter-firm relation-

ships affect a firm's investment, financing, and disclosure decisions (Kale and Shahrur, 2007; Banerjee et al., 2008), we demonstrate that these connections also help mitigate contractual incompleteness. Our analysis indicates that political ideology fosters relationship-specific innovation by mitigating hold-up risks, promoting cooperation, and strengthening relationship durability. Specifically, we find that the pairwise political ideology between upstream and downstream firms positively influences supplier innovation.

Further, our study contributes to the general literature examining the capital market effects of economic interdependencies among firms. Existing research shows that these interdependencies can influence equity market outcomes. For example, Hertzel et al. (2008) demonstrate that supplier abnormal returns are significantly negative around the financial distress of a major customer, while Pandit et al. (2011) find a positive correlation between the abnormal returns of suppliers and customers on days when the customer releases an earnings announcement, suggesting that customer information can revise investors' expectations about the supplier's future economics. Gong and Luo (2018) reveal that supply chain loans reduce the demand for accounting conservatism among borrowers, and Amiram et al. (2020) provide insights into the mechanisms affecting loan spread and lead arranger retained share in the syndicated loan market. Our study is the first to provide evidence of the market reaction to the interdependencies of firms' political ideologies. We find an unexpected but reasonable market reaction during the Trump administration, further evidencing how the U.S. became increasingly politically polarized during that period and how such polarization reshaped firm relationships.

### 2. Hypotheses Development

The establishment of supply chain relationships serves to mitigate potential incentive distortions inherent in conducting all business operations within a single firm (Coase, 1937). Firms, in their pursuit of maximizing value, often prefer to engage in transactions with other firms at an "arm's length" rather than through internalization via vertical integration, particularly when the value of transactions within a firm is comparable to that in the market (Lafontaine and Slade, 2007).

Nevertheless, nearly all supply chain relationships are founded upon incomplete contracts

(Hart and Moore, 1999), which inherently give rise to agency problems (Coase, 1937; Granovetter, 1985; Williamson, 1979). This will ultimately lead to opportunism<sup>9</sup>, and hold-up problems<sup>10</sup>, thereby jeopardizing the stability of supply chain relationships (Krishnan et al., 2012; Holmström and Roberts, 1998). Aiming to mitigate agency and transaction costs, close customer-supplier relationships with strong trust serve as a substitute for vertical integration (Cen et al., 2017), however, the challenge lies in establishing such close relationships.

### 2.1. In-Group Favoritism Facilitates Supply Relationship Establishment

Political orientation significantly influences business operations and decision-making (Banda et al., 2020). Conflicts among individuals with different political beliefs can evolve from policy disagreements to encompass broader social identity conflicts, even in non-political contexts. This ideological divide can affect trust and cooperativeness, impacting the productivity and effectiveness of managerial decision-making (Goette et al., 2012; Carlin and Love, 2013; Burbano, 2021).

Political science theories suggest that individuals are more inclined to cooperate with those who share their political ideology (in-group members) compared to out-group members (Balliet et al., 2014; Makimura and Yamagishi, 2003)<sup>11</sup>. This preference stems from a sense of pride and self-esteem derived from in-group affiliation, which can lead to a willingness to engage in financial transactions with fellow group members (Lemyre and Smith, 1985; Hernandez-Lagos and Minor, 2015). Conversely, this in-group favoritism can result in discrimination against out-group members. In the decision-making process, a shared political ideology can enhance trust among potential business partners, increasing the likelihood of in-group cooperation. Thus, our research asks: Does the alignment of the firm's political ideology can enhance trust among potential business partners.

<sup>&</sup>lt;sup>9</sup>For example, customers exercise their bargaining power and delay payment.

<sup>&</sup>lt;sup>10</sup>For example, the return on relationship-specific investment is referred to quasi-rents, and the vulnerability of quasi-rents to appropriation by the non-investing party is referred to as the hold-up problem (Klein et al., 1978). Suppose a coal mine invests \$1 million in development for a local energy utility, expecting a 10% return to justify the investment. However, once the capital is sunk and coal prices are renegotiated, the prices may not reflect the sunk cost, potentially yielding less than the required 10% return. (Krishnan et al., 2012).

<sup>&</sup>lt;sup>11</sup>Social Identity Theory from (Tajfel, 1978) claims identities shape social perceptions, attitudes, and behaviors, and salient group differences lead people to form psychological attachments to an "in-group". Ingroup members (1) magnify differences between themselves and a psychologically relevant "out-group"; (2) exhibit favoritism toward in-group members; and (3) perceive the out-group as undifferentiated, dissimilar, and inferior.

ical ideologies between supplier and customer influence the establishment of supply chain relationships? And what is the impact of such alignment?

Meanwhile, supply chain cooperation necessitates collaboration among employees at all levels, particularly rank-and-file employees, who actively contribute to resolving operational issues and challenges within the supply chain (Cen and Dasgupta, 2021). Given that employees at all levels bring their political ideologies into firms, the introduction of conservative or liberal ideologies by rank-and-file employees into the workplace inevitably influences decision-making processes and shapes social interactions, whether consciously or unconsciously (Swigart et al., 2020). Thus, the overall firm's political ideology assumes significance in shaping the firm's supply chain relationships. In light of this analysis, our research focuses on the political ideology of the whole firm and hypothesizes that congruence in political ideology can increase the likelihood of establishing supply chain relationships.

# $\mathrm{H1}_{a}$ : Customers and suppliers sharing a same organizational political ideology are more likely to establish a new supply chain relationship.

However, the convergence theory in the supply chain management literature posits that supply chain management entails a universal set of management practices and principles that transcend cultural boundaries (Griffith and Myers, 2005; Revilla and Sáenz, 2014) <sup>12</sup>. Organizations with different cultures within the same supply chain are expected to share a common understanding of business and engage in similar behavior when doing businesses. Consequently, when organizations make decisions regarding supply chain establishment, the decision-making process should strictly adhere to official standards with minimal consideration of traditions or cultures, including political ideology. Sharing best practices in supply chain management between suppliers and customers emphasizes objectivity and impartiality. If the convergent theory holds true, differences in political ideology within the supply chain will not significantly influence the likelihood of establishing the supply chain.

<sup>&</sup>lt;sup>12</sup>Convergence theory states the decision makers from different nations (cultures) within the same supply chain would aggregate the same understanding of the same sources of disruptions and would engage in similar behavior regarding the decisions made in order to impose corrective actions, which would imply similar logic and managerial practices in the decision-making process(Weed, 1979).

 $\mathrm{H1}_{b}$ : Customers and suppliers with similar political ideologies will not significantly impact the likelihood of building a supply chain relationship.

# 2.2. Political Trust along Supply Chain

Suppliers not only provide production inputs for their customers but also engage in trade credit and innovation activities that benefit the customers (Wang et al., 2022; Cen and Dasgupta, 2021). However, the hold-up problem makes financial arrangements and investments susceptible to opportunism, especially as the deliverables are challenging to specify ex-ante in a contract. Contractual incompleteness and lack of trust hinder cooperation between customers and suppliers (Chen et al., 2023).

Therefore, trust between parties becomes crucial in mitigating the negative impact of the hold-up problem. Zucker (1986) defines trust as a "set of expectations shared by all those involved in an exchange". Macneil (1983) emphasizes that expectations are shaped by formal social and regulatory structures, hierarchical positions, or customs. Trust develops from recurring patterns of exchange, the gradual formation of shared expectations, and the establishment of reputation (Zucker, 1986; Neu, 1991; Stolowy et al., 2014).

Organizational political ideology serves as such confirmation as it is coherent and stable. Employees import their political ideology into an organization to reflect their personal values, which are often resistant to change (Chow et al., 2021), meeting the requirement for building trust (Sztompka, 1999; Joyce, 2020). Since individuals often perceive members of their own group as inherently superior and more competent than those in out-groups (Sidanius et al., 1994). Thus, when sharing the same political ideology, same organizational political ideology foster trust between two parties (Guiso et al., 2009; Bottazzi et al., 2008; Duchin et al., 2023).

Meanwhile, since relationship-specific innovations have a lower value in an alternative use and the trade credit makes supplier in payment risk, sunk investments in these assets and the payment risk give customers more ex-post bargaining power at renegotiation (Klein et al., 1978; Williamson, 1979; Riordan and Williamson, 1985; Grossman and Hart, 1986; Hart and Moore, 1990). Thus, when suppliers trust and want to build a stable supply chain relationship with customers, suppliers may be more willing to invest in relationship-specific innovation and offer a more generous trade credit policy (Cen and Dasgupta, 2021). Therefore, we expect that greater political similarity could lead to a more friendly financial

credit arrangement between customers and suppliers and more relation-specific innovations from supplier to customer.

Our second hypothesis is:

# H2: Political Ideology Similarity between the supplier and customer will increase the supplier trade credit and relation-specific innovations.

# 2.3. The Reaction from Third Party Stakeholders

As discussed, the same political ideologies might increase the likelihood of building a supply chain relationship and mitigate hold-up problems, indicating a stable future cash inflow for suppliers. Same political ideologies could prolong the business relationship between the supplier and customer, possibly because a connected supplier is more likely to be treated favorably or "protected" from the vagaries of customer procurement practices when contracts are allocated or renewed (Dasgupta et al., 2021). Therefore, third-party stakeholders, including banks and investors, may view it positively when a firm contracts with a customer sharing the same political ideology. Banks, in particular, can gather insights into a firm's business conditions from the firm's customer who is also a client of the bank (De Franco et al., 2021; Giacomini et al., 2024). Furthermore, research by Dagostino et al. (2023) shows that banks consider political ideology when determining loan pricing. Therefore, if a bank views such alignment positively by believing that firms will have a stable business income when contracting with ideologically aligned customers, it may lower its loan prices. Consequently, we expect that:

H3: Banks will lower their loan prices for firms whose customers are also clients of the bank, and share the same political ideology with the firms.

#### 3. Data and Summary Statistics

In this section, we introduce our data sources, main variable construction, and corresponding summary statistics. As we study how political ideology impacts the formation of supply chain relationships and the associated outcomes, our dataset incorporates data on the supply chain, political contributions, and other datasets, including patents, syndicate loan characteristics, and firm fundamentals.

# 3.1. Supply Chain Relationships

We obtain data on supply chain relationships from FactSet Revere, which provides the most comprehensive global supply chain data across over one hundred countries. It compiles supplier-customer relationships from various sources, including the firm's annual filings (SEC 10-K), investor presentations, company websites, and press releases. Apart from that, it identifies entities disclosed by the source company, allowing us to construct counterfactual relationships and dummies indicating the realized relationships.

Since we can only observe data on U.S. firms' political contributions, we keep all the realized and counterfactual supplier-customer relationships for public firms headquartered in the U.S. between 2005 and 2022. We remove the firms in the year with less than 5 contribution records to avoid the extreme records. We map the FactSet Revere database with Compustat using the firm's CUSIP to obtain the accounting data. We exclude the regulated utility industry (SIC code 4900-4999), financial services industry (SIC codes 6000-6900), and government entities (SIC code 9000-9999), and remove observations with missing values for political ideology and control variables.

Our final sample consists of 30,246 realized and 468,522 counterfactual unique supplier-customer pairs from 3,555 public firms headquartered in the U.S. Table 1 reports the summary statistics of the characteristics for the suppliers and customers. These variables include firm size (natural logarithm of total assets), leverage, return on assets (ROA), supplier competition (proxied by Herfindahl-Hirschman Index, HHI), book-to-market ratio, Tobin's Q, and geographical distance between the headquarters of the supplier and customer. The detailed definitions of variables can be referred to in Table A.1 in the Appendix. On average, the size of customers is larger than the suppliers. The mean log value of total assets is 8.00 and 8.36 for suppliers and customers, respectively. The unconditional mean likelihood of forming a supply chain relationship is only 2.8%, suggesting a competitive environment in the matching between suppliers and customers.

# 3.2. Political Contributions

To measure the political ideology of U.S. firms, we obtain data on political contributions by individuals from the Federal Election Commission (FEC) for the period 2001-2022. The

database compiles detailed individual contributions data in excess of \$200, as well as (i) transaction date, and amount, (ii) the donor's self-reported name, address, occupation, and employer, and (iii) the ID of the Political Action Committee (PAC) receiving the contribution. The initial database covers 12,059,956 contributions from individuals.

We follow Duchin et al. (2023) to process the political contributions data from FEC with several slight modifications. Specifically, to begin with, we remove transactions whose associated employer cannot be identified (e.g., "Self Employed", "Information Requested", "None", "Retired", "Unemployed", "Housewife", "Student", etc.), and manually match the remaining self-reported employer and FactSet Revere database with firms' legal names. Next, we classify each contribution into Democratic or Republican by referring to the party affiliation of the PAC receiving the contribution and its associated candidates. If we cannot identify the party affiliation of the receiving PAC (for instance, the PAC of the employer itself), we classify it as a Democratic (Republican) affiliation if within a specified election cycle at least 80% of its contributions are allocated to committees declared as Democratic (Republican). After dropping the transactions that are implicit with the donor's employer, cannot be assigned a party affiliation, or cannot be matched with firms in FactSet Revere, we are left with 3,935,291 contributions made by 8,017 unique firms.

We then construct  $Political\ Ideology\ Score$  for firm i in year t based on historical political contributions that are made by employees of firm i in the past four years (i.e., year t-5 to t-1) <sup>13</sup>. Specifically, we construct firm i's  $Political\ Ideology\ Score\ by\ Num$  by summing up the number of contributions of firm i to Republicans in between of t-5 and t-1, scaled by the total number of contributions in firm i during the four-year window. Similarly, construct firm i's  $Political\ Ideology\ Score\ by\ Contri$  by summing up the total amount of contributions to Republicans by firm i's employees in between of t-5 and t-1, scaled by the total amount of contributions of firm i during this period. To avoid biased measures on political ideology scores due to insufficient political contributions, we require at least five contributions during

<sup>&</sup>lt;sup>13</sup>As the inception year of FactSet Revere database is 2003, we do not calculate the political ideology measure with an eight-year window as done by Duchin et al. (2023) to avoid extreme data loss. Prior studies use shorter window (e.g., one or two years) to measure individual's or entities' political ideology (e.g., Ren, 2020; Fos et al., 2023; Kempf et al., 2023). We believe our four-year window is long enough and is less of a concern of endogeneity issue. However, our results are not sensitive to the choice of window length.

the four-year window for each firm. This process yields 78,072 firm-year-level observations of political ideology for 5,798 firms, with non-missing values for all political ideology measures.

In the next step, we construct two main variables of interest to measure the extent to which a supplier aligns with a customer in terms of political ideology. First, we divide the spectrum of political ideology into five intervals: 0-0.2, 0.2-0.4, 0.4-0.6, 0.6-0.8, and 0.8-1, where 0 and 1 indicates entire affiliation to Democratic and Republican, respectively. Next, we construct a dummy  $Same_{i,j}$  for supplier i and customer j that equals 1 if the  $Political\ Ideology\ Score$  (either by number or by contribution) of firms i and j lie in the identical interval, and 0 otherwise. This division is analogous to classifying political ideology into "left-wing", "center-left", "centrism", "center-right", and "right-wing" (Laponce, 1972; Gidron and Ziblatt, 2019). The Same measure captures whether two firms lie in the same classifications on the political spectrum so that sharing similar corporate cultures and views on public matters, and potentially align in their business engagement strategies, enhancing the likelihood of collaborating as supplier and customer.

Second, we construct  $Divergence_{i,j}$  for supplier i and customer j by taking the absolute value of the difference between their  $Political\ Ideology\ Score$ . This measure captures the extent of divergence between a pair of suppliers and customers in terms of political ideology, which cannot be reflected by a binary variable. Figure 2 illustrates the intuition of our main variables of interest. Firms A, B, and C have  $Political\ Ideology\ Score$  of 0.25, 0.35, and 0.9, respectively. As both Firm A and B are situated in the domain of 0.2-0.4, they are located in the same interval (analogous to "center-left") on the political spectrum,  $Same_{A,B}$  equals 1 and the associated  $Divergence_{A,B}$  is 0.1. Accordingly, firms A and B are more likely to form a supply chain relationship. Firms A and C, however, are far apart on the political spectrum (analogous to "center-left" versus "right-wing"),  $Divergence_{A,C}$  equalling 0.65 captures the huge divergence between the two firms, and correspondingly,  $Same_{A,C}$  equals 0. Thus, the divergence in political ideology may isolate one another, hindering them from conducting business together.

Table 1 reports the summary statistics of the political ideology measures. In the realized

<sup>&</sup>lt;sup>14</sup>Our results are not sensitive to the types of classifications.

and conterfactual supply chain relationships, 34.7% (25.8%) of the pairs share the same interval on the political spectrum by number (by contribution). Meanwhile, the difference in political ideology is merely 0.26 (0.33) by number (by contribution). Since our political ideology measures take into account of the entire employee universe in each firm, the party affiliations of both suppliers and customers are slightly more aligned with Democrats as rank-and-file employees are more Democratic-oriented (Ren, 2020).

# 3.3. Other Data Sources

In addition to supply chain and political contribution databases, we obtain other data from various sources. Specifically, we obtain patent data obtained from PatentsView <sup>15</sup> and Kogan et al. (2017). The richness of the patent data allows us to construct pair-level measures that likely capture the supplier innovation that is tailored for the customer. We follow the method from Dasgupta et al. (2021) to identify whether the supplier produces any patent that cites its customer's patent portfolio as well as the number of cross-citations. The presence and intensity of cross-citations indicate that the supplier tailors its R&D to its customer's technology (Jaffe, 1986).

The data on corporate loans are from Refinitiv LoanConnector Dealscan, and we select the loans to our sample if any of the borrower's customers also has an outstanding facility in any of the lending banks in this loan. To obtain data on customer-specific trade credit, we follow Freeman (2023) and manually collect firms' disclosures of customer-specific account receivables and revenues from annual 10-Ks. Firms' accounting data is from the Compustat database. A limitation of Compustat is that it documents only firms' latest geographical information. As we study the matching between suppliers and customers, the correct historical information on the location of firms' headquarters is essential to control their geographical distances. To this end, we obtain historical data on the firms' headquarters' locations using Bill McDonald's Augmented 10-X Header Data, which was sourced from 10-K and 10-Q filings available on EDGAR dating back to 1994.

<sup>&</sup>lt;sup>15</sup>See PatentView.

# 4. Research Design and Results

In this section, we move on to illustrate our research designs and corresponding results.

# 4.1. In-Group Favoritism Facilitates Supply Relationship Establishment

As outlined in Section 2.1, focal firms (suppliers) and potential customers sharing the same political ideologies may facilitate the establishment of supply chain relationships, i.e., strong in-group trust between supplier and customers ( $H1_a$ ). Alternatively, the decision-making process on supply chain collaborations should somewhat adhere to official standards and eliminate the effect of political divergence ( $H1_b$ ). To formally test whether similar political ideologies between focal suppliers and potential customers will translate into the formation of supply chain relationships, we run the following regression,

$$OnChain_{i,j,t} = \beta_1 \times Same_{i,j,t} \text{ or } Divergence_{i,j,t} + \mathbf{X}_{i,j,t} + \mathbf{FEs} + \varepsilon_{i,j,t},$$
 (1)

where  $OnChain_{i,j,t}$  is a dummy variable that equals 1 if the focal firm (supplier) i and potential customer j form a supply chain relationship in year t, and 0 otherwise. We construct counterfactual supplier-customer pairs (i.e., the zero pairs) with all the competitors disclosed by the real customers of the focal supplier i in year t.  $Same_{i,j,t}$  and  $Divergence_{i,j,t}$  are defined in Section 3.2. Specifically,  $Same_{i,j,t}$  is an indicator of whether the political ideology scores of supplier i and potential customer j lie in the same interval on the political spectrum, and  $Divergence_{i,j,t}$  measures the absolute difference between their political ideology scores.  $\mathbf{X}_{i,j,t}$ are firm-level and pair-level control variables such as total asset, leverage, ROA, Tobin's Q, the book-to-market ratio of supplier i and potential customer j, their geographic distance, and supplier i's competition (HHI). **FEs** include different combinations of fixed effects such as fiscal year, supplier, and customer, and the interactions of fiscal year and supplier, customer fixed effects, respectively. Standard errors are clustered at the supplier-customer level. The detailed definitions of variables can be referred to in Table A.1 in the Appendix. We require each focal firm (supplier) i to form at least one supply chain relationship in year t. Moreover, in order to avoid the bias caused by past relationships, regarding the real supply chain relationships we keep only the first-time realized ones, i.e., if supplier i and potential customer j form a supply chain relationship in year t, we remove pair i-j in later samples no matter such relationship continues or not.

If Hypothesis 1a holds, we expect similarity in suppliers' and potential customers' political ideologies to facilitate the establishment of supply chain relationships, thus  $\beta_1$  for  $Same_{i,j,t}$ and  $Divergence_{i,j,t}$  should be positive and negative, respectively. Alternatively,  $\beta_1$  will be insignificant if Hypothesis 1b holds. The results are presented in Table 2. In Columns 1 to 4, the independent variables are constructed with employee numbers, and in Columns 5 to 8 the independent variables are constructed with political contributions. Throughout the specifications, the consistently statistically significant coefficients of our main independent variables of interest indicate a strong correlation between political ideology similarity and the likelihood of becoming supplier-customer pairs. Specifically, the coefficient of Same in Column 1 indicates that if an i-j pair shares the same position on the political spectrum, the likelihood of becoming real supply chain relationships will be raised by 0.2\%, which amounts to 7.1% (0.2%/0.028) increase relative to the unconditional mean value. In contrast, a onestandard-deviation increase in the political divergence in Column 2 corresponds to a 5.7%  $(-0.007 \times 0.226/0.028)$  decrease in the matching likelihood relative to the mean value. The results using political contributions are similar both in sign and magnitude. In Columns 3 to 4 and 7 to 8, we incorporate  $Supplier \times Year$  and  $Customer \times Year$  fixed effects, which wipe out any time-varying firm-level unobservable factors on shaping the supply chain relationships such as shifts in supplier and customer strategies or customer's endogenous concerns on supplier's ESG performance (Dai et al., 2021; Shi et al., 2023). Therefore, our results are consistent with Hypothesis 1a which predicts that sharing similar political ideologies can facilitate the formation of supply chain relationships.

In Table 9, we regress the political divergence of pair i-j in year t + 1 on the dummy variable indicating pair i-j forms a real supply chain relationship in year t. We find the formation of a supply chain relationship negatively predicts political divergence between supplier i and customer j, implying collaboration on the supply chain may potentially mitigate the divergence in political ideology, hence stabilizing the supply chains. As robustness checks, in Panel A Table 10, we regress the duration of a realized supply chain relationship on the political measures that are constructed using the political contribution data during

the window. We find same political ideologies within the relationship period lengthen its longevity. Further, in Panel B Table 10 we run Cox and Weibull models and find that same political ideology lowers the probability of snapping a supply chain relationship. Taken together, our results shed light on the fact that similar political ideologies between suppliers and customers may stabilize supply chain relationships.

#### 4.2. Addressing Endogeneity Concerns

The relation between decisions on forming business relationships and political ideology proxied by political contributions might be endogenous. For example, a focal supplier can strategically make contributions to a certain party supported by the potential customer with which the focal supplier would like to connect. Thus, reverse causality problems arise as such strategic business connections will translate into persistent political convergence. Although the concern of strategic contributions is not severe since we use the data of all employees in the past four years, we go one step further to tackle the endogeneity issues with instrumental variables.

To construct the IV, we continue to use the Same and Divergence variables but on the state level. Specifically, for a focal firm located in state m and a potential customer in state n, we calculate the political ideology scores with the entire political contributions in states m and n, compare their corresponding positions on the political spectrum to obtain the Same variable, and take the absolute difference as the Divergence variable. The state-level political measures cannot be driven by the business decisions of micro-level companies. Meanwhile, the employees' political ideologies are very likely to be impacted by in-state neighbors and friends, consisting of the micro basis of state-level political ideologies.

In table 3, the results of first-stage regressions are presented in Columns 5-8. The dependent variables are the pair-level political ideology measures and the independent variables are the state-level IVs. The coefficients constructed by employee numbers for *StateSame* and *StateDivergence* are 0.036 and 0.223, suggesting that sharing the same state-level ideologies will translate into a 3.6% higher likelihood of sharing the same pair-level ideologies, and a 10% increase in the state-level political divergence is associated with 2.23% increase in pair-level political divergence. The coefficients throughout the specifications are statisti-

cally positive. Further, the Kleibergen-Paap rk Wald F-statistics are much greater than the threshold of 10, rejecting the null hypothesis of weak instrumental variables.

The second-stage results are presented in Columns 1 to 4. Columns 1 and 3 use Same as the dependent variable. The coefficient of Same constructed by employee number is significant at 10% level and equals 0.03, suggesting sharing the same political ideology increases the matching likelihood by 3%, which is 1.07 (0.03/0.028) times the unconditional mean value. Although the coefficient of Same constructed by contributions is not statistically significant, its magnitude of 0.025 is close to that of the coefficient in Column 1. In addition, the results for *Divergence* are reported in Columns 2 and 4. The coefficients are -0.033 and -0.066 for *Divergence* constructed by employee number and contribution, respectively, and both of which are statistically significant at the 1% level. A one-standard-deviationincrease in the political divergence is associated with 26.6% ( $-0.033 \times 0.226/0.028$ ) or 53.3% $(-0.066 \times 0.226/0.028)$  decline in the matching likelihood relative to the unconditional mean value. All of the economic magnitudes overshoot the baseline OLS regressions since the IVcompliers are more likely to be firms that are easily affected by their in-state neighbors as their frequent participation in political donations implies activism in political engagement. Therefore, such a pair of activist firms are more prone to the effects of political ideology, with the same ideology translating into a higher level of trust than their counterparts across the supply chain.

# 4.3. Political Trust along Supply Chain

Having established the fact that firms sharing the same political ideology will be more likely to form supply chain relationships, we move on to examine the potential mechanisms. As outlined in Hypothesis 2, we predict a focal firm (supplier) gives more trust to customers, thus extending more trade credit (account receivables) if the customers share the same political ideology with the focal firm (supplier). We run the regression as below:

$$TradeCredit_{i,j,t} = \beta_1 \times Same_{i,j,t} \text{ or } Divergence_{i,j,t} + \mathbf{X}_{i,j,t} + \mathbf{FEs} + \varepsilon_{i,j,t},$$
 (2)

where  $TradeCredit_{i,j,t}$  is either the relationship-specific trade receivable (percentage of account receivable extended to customer j by the focal supplier i extracted from supplier's

10-K filings), or the overall trade credit (log value of the total account receivable of the focal supplier i). The other variables are similarly defined in Equation (1).

Table 4 reports the result. In Panel A of Table 4, we regress the relationship-specific trade credit on the political ideology measures. The coefficients for Same are positive and the coefficients for *Divergence* are negative, suggesting that when the political ideologies between the supplier and customer are similar, the focal firm (supplier) put more trust in the customer and extend more trade credit. Throughout the specifications, the coefficients are statistically significant at the 5% level except in Column 3, where the coefficient is insignificant but the sign is consistent with our hypothesis. In Panel B, we replace the dependent variable with the total trade credit of the focal suppliers and regress it on the political ideology measures. Not surprisingly, in Columns 1 and 2, the coefficients continue to be statistically significant and the signs are in line with those in Panel A. The coefficients in Panel B, however, are not significant anymore. This could be because the political ideology measures constructed by employee numbers are more accurate to proxy for the real ideology as ordinary rank-and-file employees may contribute less but still play an important role in the supply chain, for example, marketing with the normal customers during which CEOs or board members will not engage in. In Table A.3, we provide similar results using total sales as the outcome variable. The same political ideologies enhance the supplier's total sales and thus maintain the cash flow, consolidating the supply chain relationships.

Further, Hypothesis 2 predicts suppliers will put more effort into relationship-specific investments due to higher trust in politically aligned customers as such investments are associated with higher sunk cost. To test this, we run the following regression:

$$RelationInv_{i,j,t} = \beta_1 \times Same_{i,j,t} \text{ or } Divergence_{i,j,t} + \mathbf{X}_{i,j,t} + \mathbf{FEs} + \varepsilon_{i,j,t},$$
 (3)

where  $RelationInv_{i,j,t}$  signifies the relationship-specific investment made by supplier i to customer j, which is proxied by the log value of one plus patent citation of supplier i on customer j's patents in year t + 1, or a dummy variable that equals 1 if supplier i cites customer j's patents in year t + 1 <sup>16</sup>. The other variables are consistent with Equation (1).

<sup>&</sup>lt;sup>16</sup>We are using Patent application year to match with the data.

Table 5 reports the results. As predicted, suppliers i are more likely to cite customer j's patents and thus make more relationship-specific investments if they are more politically aligned. The coefficients are significantly positive and negative for all the specifications in odd and even columns, respectively.

Although suppliers make more relationship-specific investments in more aligned customers, we predict they benefit more and attach more importance to supply chain relationships, thus reducing the overall research input. This is because a more stable supply chain relationship may guarantee stable cash flows and relieve burdens on input. In Table 6, we present results showing that suppliers become less burdened in terms of R&D input when conducting business with politically aligned customers. The customer's R&D is positively associated with the supplier's R&D. However, if a supplier and a specific customer share same political ideology, the supplier can focus more on the specific customer and reduce the overall R%D input, as evidenced by the negative (positive) interactions between Same (Divergence) and customer's R&D. Table A.2 reports similar results for supplier's patent filings, where same political ideology with customer would reduce supplier's patent filings.

Collectively, we show that enhanced trust along the supply chain is a potential mechanism that firms sharing the same political ideologies may conduct business together as evidenced by higher relationship-specific trade credit and investments. Suppliers can put more effort into politically aligned supply chain relationships and be relieved from substantial research expenditures.

# 4.4. The Reaction from Third Party Stakeholders

In the previous sections, we show evidence that similar political ideologies may stabilize the supply chain relationship, enhance trust, and expand supplier's cash flow. Therefore, the outlook of a supplier is more promising if it has more politically aligned customers. Thus, we may expect third parties to react positively to politically aligned supply chain relationships. To test this hypothesis, we examine the reactions of banks and the market.

We begin with testing the banks' reaction to politically aligned supply chain relationships. We run the following regression:

$$LoanSpread_{i,j,k,t} = \beta_1 \times Same_{i,j,t} \text{ or } Divergence_{i,j,t} + \mathbf{X}_{i,j,k,t} + \mathbf{FEs} + \varepsilon_{i,j,k,t},$$
 (4)

where  $LoanSpread_{i,j,k,t}$  is the loan spread that bank k provides to the supplier i if the supplier i and customer j are both the clients of bank k in year t. The other variables are similarly defined as in Equation (1) except that we include loan-level controls and loan-purpose fixed effects. We require both the supplier i and customer j to be the same bank j's clients to guarantee the political ideology will be taken into consideration by the bank.

Table 7 reports the results. We find that banks tend to offer favorable loan contracts to the supplier when the customer has a similar political ideology as evidenced by lower loan spread. The coefficients on *Same* and *Divergence* are negative and positive, respectively, and are statistically significant at 5% or 10% level across the specifications other than that in Column 3. This result suggests that banks recognize the promising outlook of the supplier when the customer is politically aligned.

We further test the market reaction on politically aligned firms form supply chain relationships by exploiting the cumulative abnormal return (CAR) around the date when the supply chain relationship is announced (first emerges in FactSet database) <sup>17</sup>. Tables 8 and A.4 report the results. Although in general, the market reacts negatively when politically aligned pairs form supply chain relationships, the reaction turns positive during the Trump period, suggesting the market believes the same political ideology plays a more important role in the stabilization of supply chain relationships during politically turbulent periods. The results indicate the unique political environment during the Trump administration's influential period, which was coincided with an unprecedented era of political polarization in the United States. While Trump campaigned with some universalistic slogans (e.g., "make America great again"), he strongly catered to his political base. Consequently, the intensification of particularism during the Trump presidency was to be expected. This results echoes the findings of Cen et al. (2023).

#### 4.5. Heterogeneity Test

In this section, we conduct several cross-sectional tests to examine whether the effect of political alignment varies across supplier-potential customer pairs. We consider the following pair-level and supplier-level characteristics. These variables include: 1) the geographical

<sup>&</sup>lt;sup>17</sup>We also find similar impacts on Supplier's Tobin's Q.

distance between the pair of firms, *Distance*; 2) supplier's total assets, *Sup\_Asset*; 3) suppliers' competition (supplier's HHI), *Sup\_HHI*; and 4) supplier's ROA, *Sup\_ROA*. The variables are centered and interacted with the political ideology measures.

Table 11 reports the results of heterogeneity tests. First, we find that a longer geographical distance between the focal supplier and potential customer will augment the effect of political ideologies as shown by the positive signs of interactions with *Same* and negative signs of interactions with *Divergence*. This is intuitive since familiarity may disappear as the distance between the firms increases, thus political ideology becomes more essential in the supply chain formation, working as the first impression of a potential business partner. Second, suppliers with larger total assets and higher ROA benefit more from the political alignment in matching with potential customers. This is possibly because these suppliers are more reputable and profitable, thus will be given more trust by the politically aligned customers. Third, heightened competition among suppliers dilutes the impact of political alignment. With intense competition comes a greater pool of qualified suppliers, thereby reducing the significance of customers' considerations regarding political ideology.

# 5. Conclusion

Political polarization in the United States has escalated over recent decades, permeating various aspects of society, including economic decision-making. Our paper studies the realm of supply chain relationships, exploring how firms' political ideologies influence their interactions.

By examining the formation, duration, and dynamics of supply chain relationships in light of political ideology, we provide evidence of the impact of partisan affiliation on economic activities. Specifically, we find that firms sharing the same political ideologies which foster trust and cooperation could facilitate supply chain relationships and innovation between suppliers and customers. Additionally, our study highlights the role of third-party stakeholders, such as banks and the market, in reacting to and shaping these relationships based on political alignment.

Our research contributes to the growing literature exploring the intersection of political partisanship and economic behavior. By focusing on supply chain dynamics, we offer insights

into how political ideology permeates business interactions and influences decision-making processes. These findings not only deepen the understanding of the complex interplay between politics and economics but also provide practical implications for firms navigating increasingly polarized environments.

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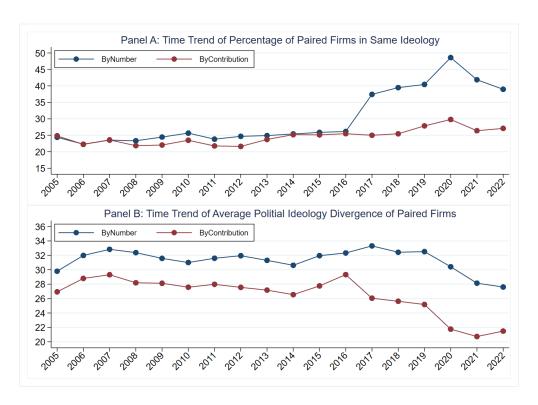
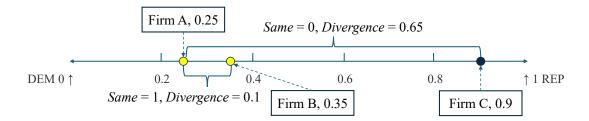


Figure 1. Time Trend

This figure demonstrates the time trend of political ideology measures between the realized supply-customer pairs. Panel A and Panel B plot the mean value of *Same* and *Divergence* for all the realized supply-customer pairs in each year, respectively. The blue lines denote the political ideology measures constructed with employee numbers and the red lines denote the political ideology measures constructed with political contributions.



# Figure 2. Political Ideology Spectrum

This figure illustrates the political spectrum. We divide the spectrum of political ideology into five intervals: 0-0.2, 0.2-0.4, 0.4-0.6, 0.6-0.8, and 0.8-1, representing "left-wing", "center-left", "centrism", "center-right", and "right-wing", where 0 and 1 indicate entire affiliation to Democratic and Republican, respectively. Firms A, B, and C have Political Ideology Score of 0.25, 0.35, and 0.9, respectively. Firm A and B are situated in the domain of 0.2-0.4 ("center-left"),  $Same_{A,B}$  equals 1, and the associated  $Divergence_{A,B}$  is 0.1. Firms A and C, are far apart on the political spectrum ("center-left" versus "right-wing"),  $Same_{A,C}$  equals 0, and  $Divergence_{A,C}$  equals 0.65.

Table 1. Descriptive Statistics

	N	$\mu$	σ	$25^{\mathrm{th}}\%$ ile	$50^{\mathrm{th}}\%$ ile	$75^{\mathrm{th}}\%$ ile	$100^{\mathrm{th}}\%$ ile		
Panel A: In Supply Chain Pair (First Time) and Potential Pairs									
OnChain	973,673	0.028	0.164	0.000	0.000	0.000	1.000		
Distance	$973,\!673$	6.539	1.496	6.062	6.941	7.634	7.895		
TrumpDum	$973,\!673$	0.549	0.498	0.000	1.000	1.000	1.000		
Political Ideology(By									
Same	973,673	0.347	0.476	0.000	0.000	1.000	1.000		
Divergence	973,673	0.260	0.226	0.080	0.192	0.386	1.000		
Sup Ideology Score	973,673	0.317	0.279	0.088	0.231	0.485	1.000		
Cus Ideology Score	973,673	0.352	0.284	0.117	0.277	0.545	1.000		
Political Ideology(By	,								
Same	973,673	0.258	0.438	0.000	0.000	1.000	1.000		
Divergence	973,673	0.325	0.249	0.115	0.272	0.493	1.000		
Sup_Ideology Score	973,673	0.394	0.312	0.116	0.330	0.645	1.000		
Cus Ideology Score	973,673	0.441	0.315	0.159	0.403	0.709	1.000		
Suppliers	010,010	0.111	0.010	0.100	0.100	0.100	1.000		
Sup Asset	973,673	7.998	2.014	6.609	7.891	9.306	12.528		
Sup_Asset Sup_Leverage	973,673	0.585	0.272	0.406	0.569	0.728	1.764		
Sup_ROA	973,673	0.002	0.159	-0.028	0.037	0.078	0.296		
Sup_HOII	973,673	0.235	0.200	0.089	0.169	0.284	0.992		
Sup_BTM	973,673	0.367	0.428	0.144	0.291	0.516	2.281		
Sup_DTM Sup_TobinQ	973,673	2.603	2.058	1.359	1.897	2.995	12.574		
Foc_Sales	973,673	0.791	0.549	0.463	0.653	0.961	10.142		
Sup AR	964,031	5.703	2.031	4.413	5.675	6.984	10.142		
Customers	304,031	5.705	2.031	4.410	5.015	0.304	10.100		
Cus Asset	973,673	8.356	2.061	6.936	8.322	9.790	12.681		
Cus_Asset Cus Leverage	973,673	0.629	0.271	0.460	0.615	0.770	1.689		
Cus_ROA	973,673	0.029	0.271 $0.155$	-0.013	0.013 $0.041$	0.770	0.283		
Cus_ROA Cus_BTM	973,673	0.384	0.133 $0.482$	0.143	0.309	0.032 $0.576$	2.261		
Cus_BTM Cus TobinQ	973,673	2.383	1.840	1.266	1.729	2.763	11.080		
Cus_TobinQ Cus_Sales	973,673	1.026	0.819	0.498	0.770	1.291	10.142		
Cus_Sales Cus_AR		5.932	2.171	4.463	5.988	7.426	10.142 $10.421$		
Cus_An	949,626	0.932	2.171	4.405	9.900	7.420	10.421		
Panel B: In Supply Chain Pair									
Relationship Specific									
$\operatorname{Sup}_{-}\operatorname{CrosCiteDum}_{t+1}$	$95,\!378$	0.040	0.195	0.000	0.000	0.000	1.000		
$Sup\_CrosCiteNum_{t+1}$	$95,\!378$	0.076	0.455	0.000	0.000	0.000	8.615		
$Sup_RD$	$95,\!378$	0.070	0.092	0.010	0.042	0.096	0.692		
$\operatorname{Sup}_{-}\operatorname{PatentNum}_{t+1}$	$95,\!378$	1.402	2.153	0.000	0.000	2.485	9.162		
$Sup\_TR\_Pert$	322	19.359	11.432	12.000	16.650	24.000	62.000		
$Sup\_TobinQ$	$95,\!378$	2.377	1.830	1.296	1.762	2.720	12.574		
Loan Char									
Spread	8,291	205.767	138.949	125.000	175.000	250.000	$1,\!155.000$		
Tranche Amount	8,291	734.171	$1,\!262.580$	125.000	325.000	825.000	$22,\!500.000$		
Secured	8,291	0.558	0.497	0.000	1.000	1.000	1.000		
Revolving	8,291	0.613	0.487	0.000	1.000	1.000	1.000		
Violation Probability	8,291	0.234	0.349	0.002	0.036	0.378	1.000		
Lender Number	8,291	11.099	8.370	5.000	9.000	15.000	44.000		
Market Reaction									
CAR [-1, 1]	15,747	0.001	0.049	-0.017	0.000	0.018	0.644		
CAR [-1, 3]	15,747	0.001	0.062	-0.022	0.001	0.022	1.467		
* *									

CAR [-1, 5]	15,747	0.000	0.071	-0.027	0.002	0.026	1.345
CAR [-3, 3]	15,747	0.001	0.072	-0.026	0.001	0.027	1.603
CAR [-5, 5]	15,747	0.001	0.097	-0.033	0.002	0.036	2.777

Table 2. The Probability To be On Supply Chain

	By Number				By Contribution				
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	
Dependent Variable: On Chain									
Same	0.002*** (5.17)		0.001*** (3.71)		0.001*** (3.30)		0.001** (2.39)		
Divergence		-0.007*** (-7.72)		-0.008*** (-8.07)		-0.004*** (-5.22)		-0.004*** (-5.49)	
Distance	-0.002*** (-17.75)	-0.002*** (-17.50)	-0.002*** (-16.44)	-0.002*** (-16.09)	-0.002*** (-17.82)	-0.002*** (-17.67)	-0.002*** (-16.50)	-0.002*** (-16.31)	
SupChar	,	,	,	,	,	,	,	,	
Sup_Asset	0.001*** (2.61)	0.001** $(2.55)$			$0.001^{***}$ $(2.67)$	$0.001^{***}$ $(2.61)$			
Sup_Leverage	-0.003** (-2.25)	-0.003** (-2.24)			-0.003** (-2.19)	-0.003** (-2.18)			
Sup_ROA	-0.000 (-0.19)	-0.000 (-0.20)			-0.000 (-0.16)	-0.000 (-0.16)			
Sup_HHI	-0.007 $(-1.55)$	-0.006 (-1.51)			-0.007 $(-1.54)$	-0.006 (-1.51)			
Sup_TobinQ	$0.000^{***}$ $(2.77)$	$0.000^{***}$ $(2.79)$			$0.000^{***}$ $(2.79)$	$0.000^{***}$ $(2.82)$			
Sup_BTM	-0.002*** (-2.68)	-0.002*** (-2.64)			-0.002*** (-2.68)	-0.002*** (-2.63)			
CusChar									
Cus_Asset	$0.004^{***}$ $(6.66)$	$0.003^{***}$ $(6.59)$			$0.004^{***}$ $(6.72)$	$0.004^{***}$ $(6.70)$			
Cus_Leverage	-0.002 (-1.43)	-0.002 $(-1.37)$			-0.002 (-1.36)	-0.002 (-1.34)			
Cus_ROA	-0.001 $(-0.53)$	-0.001 $(-0.53)$			-0.001 (-0.46)	-0.001 $(-0.45)$			
$Cus\_TobinQ$	$0.000^{**}$ $(2.50)$	$0.000^{**}$ $(2.51)$			0.000** $(2.56)$	$0.000^{**}$ $(2.56)$			
Cus_BTM	-0.000 (-0.01)	$0.000 \\ (0.02)$			-0.000 (-0.01)	-0.000 (-0.01)			
Year FE	Yes	Yes	No	No	Yes	Yes	No	No	
Supplier FE Customer FE	Yes Yes	Yes Yes	No No	No No	$\begin{array}{c} { m Yes} \\ { m Yes} \end{array}$	Yes Yes	No No	No No	
Year×Supplier FE	No	No	Yes	Yes	No	No	Yes	Yes	
Year×Customer FE	No	No	Yes	Yes	No	No	Yes	Yes	
$N$ Adj. $R^2$	973,673 0.078	973,673 0.078	972,434 0.148	972,434 0.148	973,673 0.078	973,673 0.078	972,434 0.148	972,434 0.148	

This table reports the effect of political ideology on the matching between suppliers and customers. The observations are on the supplier-customer-year level. The dependent variable  $OnChain_{i,j,t}$  is a dummy that equals 1 if the focal firm i (supplier) and potential customer j form a supply chain relationship in year t, 0 if the firm j is not a customer of the focal firm i and is disclosed as a competitor by i's real customers. The main independent variables of interest,  $Same_{i,j,t}$  and  $Divergence_{i,j,t}$  signify the

Political Ideology Score of the focal firm i and potential customer j in year t lie in the same interval on the political ideology spectrum, and the absolute value of their Political Ideology Score, respectively. Political Ideology Score in year t is calculated with political contribution data in the past four years, i.e., from t-5 to t-1. We incorporate a cluster of firm-level and pair-level control variables for the focal firm and potential customers, including the natural logarithm of total asset, leverage, ROA, Tobin's Q, and the book-to-market ratio of firm i and j, the focal firm's Herfindahl-Hirschman Index to measure competition, and geographical distance between firms i and j. The detailed definitions of variables can be referred to in Table A1 in the Appendix. We require each focal supplier to form at least one supply chain relationship in year t. We only keep the first-time matching in the sample to avoid bias from past relationships, i.e., if firm j becomes supplier i's customer in year t, then the i-j pair is removed from regression in all the future years after year t. All control variables are winsorized at 1% and 99% level. Standard errors are clustered at the supplier-customer level. t-values are shown in parentheses. \*, \*\*, and \*\*\* indicate statistical significance at the 10%, 5%, and 1% level, respectively.

Table 3. Instrumental Variable Analysis

	IV second stage			IV first stage				
	By Number		By Contribution		By N	umber	By Contribution	
	(1)	(2)	(3)	(4)	$\overline{}$ (5)	(6)	(7)	(8)
Same	0.030* (1.94)	,	0.025 (1.17)	,	. ,	. ,	. ,	
Divergence	,	-0.033*** (-4.06)	,	-0.066*** (-6.52)				
StateSame		,		,	0.036*** (20.32)		0.024*** (15.72)	
StateDivergence					( )	0.223*** (62.71)	( )	0.165*** (47.74)
Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Supplier FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Customer FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
First-stage F-statistics	-	-	-	-	412.99	3,932.11	247.07	2,279.57
N	$913,\!571$	$913,\!571$	913,571	$913,\!571$	$913,\!571$	$913,\!571$	$913,\!571$	$913,\!571$

This table reports the regression results of IV specifications. The observations are on the suppliercustomer-year level. Columns 5 to 8 and Columns 1 to 4 report the first-stage and second-stage regressions of the 2SLS regression, respectively. The dependent variable  $OnChain_{i,j,t}$ , is a dummy that equals 1 if the focal firm i (supplier) and potential customer j form a supply chain relationship in year t, 0 if the firm i is not a customer of the focal firm i and is disclosed as a competitor by i's real customers. The main independent variables of interest,  $Same_{i,j,t}$  and  $Divergence_{i,j,t}$  signify the  $Political\ Ideology\ Score$ of the focal firm i and potential customer j in year t lie in the same interval on the political ideology spectrum, and the absolute value of their Political Ideology Score, respectively. Political Ideology Score in year t is calculated with political contribution data in the past four years, i.e., from t-5 to t-1. The instrumental variables are political ideology measures constructed on the state level. We incorporate a cluster of firm-level and pair-level control variables for the focal firm and potential customers, including leverage, Tobin's Q, and the book-to-market ratio of firm i and j. The detailed definitions of variables can be referred to in Table A1 in the Appendix. We require each focal supplier to form at least one supply chain relationship in year t. We only keep the first-time matching in the sample to avoid bias from past relationships, i.e., if firm j becomes supplier i's customer in year t, then the i-j pair is removed from regression in all the future years after year t. Further, we drop the i-j pair if the headquarters of firms i and j are located in the same state. All control variables are winsorized at 1% and 99% level. Standard errors clustered at the supplier-customer level. t-values are shown in parentheses. \*, \*\*, and \*\*\* indicate statistical significance at the 10%, 5%, and 1% level, respectively.

Table 4. Supplier's Trade Receivable Percentage from Paired Customer

	By N	umber	By Cont	tribution
	(1)	(2)	(3)	(4)
Panel A: Trade Re	ceivable	Share in	Supplie	r
Same	3.078**		2.089	
	(2.39)		(1.41)	
Divergence	, ,	-8.752**	, ,	-6.682**
		(-2.41)		(-2.11)
Sale Pert	$0.497^{***}$		$0.527^{***}$	0.510***
	(3.47)	(3.47)	(3.65)	(3.47)
Distance	0.920*	0.880	0.838	0.819
	(1.73)	(1.65)	(1.53)	(1.47)
Controls	Yes	Yes	Yes	Yes
Year, Supplier FE	Yes	Yes	Yes	Yes
N	322	322	322	322
Adj. $R^2$	0.591	0.594	0.585	0.591
Panel B: Supplier	's Total	Trade Re	eceivable	
Same	0.006**		-0.000	
Same	(2.32)		(-0.17)	
Divergence	(=:==)	-0.027***	( 3.2.)	-0.009
		(-3.90)		(-1.49)
Cus AR	0.029***	0.029***	0.029***	0.029***
	(5.55)		(5.56)	
Controls	Yes	Yes	Yes	Yes
Year, Supplier, Customer FE	Yes	Yes	Yes	Yes

This table reports the effect of political ideology on the trade credits along the supply chain. The observations are on the supplier-customer-year level. In Panel A, the dependent variable is the percentage of customer-specific account receivables (trade credit). In Panel B, the dependent variable is the log value of the total account receivable. The main independent variables of interest,  $Same_{i,j,t}$  and  $Divergence_{i,j,t}$ denote the Political Ideology Score of the focal firm i and potential customer j in year t lie in the same interval on the political ideology spectrum, and the absolute value of their Political Ideology Score, respectively. Political Ideology Score in year t is calculated with political contribution data in the past four years, i.e., from t-5 to t-1. Sale Pert is the percentage of customer-specific sales disclosed by the focal firm (supplier) in the 10-K filing, which is filled with 10% (the threshold of mandatory disclosure) if the percentage of customer j-specific sales is missing (such as "-", "<10%", or "less than 10%") in the supplier's 10-K filing. We incorporate a cluster of firm-level and pair-level control variables for the focal firm and customers, including the natural logarithm of total asset, leverage, ROA, Tobin's Q, and the book-to-market ratio of firm i and j, the focal firm's Herfindahl-Hirschman Index to measure competition, and geographical distance between firms i and j. The detailed definitions of variables can be referred to in Table A1 in the Appendix. All control variables are winsorized at 1% and 99% level. Standard errors are clustered at the supplier-customer level. t-values are shown in parentheses. \*, \*\*, and \*\*\* indicate statistical significance at the 10%, 5%, and 1% level, respectively.

86,468

0.985

Adi.  $R^2$ 

86,468

0.985

86,468

0.985

86,468

0.985

Table 5. Relation-Specific Innovation and Political Ideology

	By Number			By Contribution				
	$ \begin{array}{c} \hline (1) \\ \text{CiteDum}_{t+1} \end{array} $	(2)CiteDum <sub>t+1</sub>	(3)CiteNum <sub>t+1</sub>	(4)CiteNum <sub>t+1</sub>	$ \begin{array}{c} \hline (5) \\ \text{CiteDum}_{t+1} \end{array} $	$ \begin{array}{c} (6) \\ \text{CiteDum}_{t+1} \end{array} $	(7) CiteNum <sub><math>t+1</math></sub>	(8)CiteNum <sub>t+1</sub>
Same	0.006*** (3.46)		0.015*** (3.44)		0.006*** (3.15)		0.021*** (4.04)	
Divergence	,	-0.016*** (-4.11)	` ,	-0.039*** (-4.04)	, ,	-0.016*** (-4.53)	, ,	-0.054*** (-5.76)
Sup_R&D	-0.010 (-0.96)	-0.009 (-0.91)	-0.001 (-0.03)	0.001 (0.02)	-0.010 (-0.99)	-0.009 (-0.93)	-0.001 (-0.06)	0.001 (0.03)
Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Supplier FE $$	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
$\overline{N}$	95,378	95,378	95,378	95,378	95,378	95,378	95,378	95,378
Adj. $R^2$	0.194	0.194	0.173	0.173	0.194	0.195	0.173	0.174

This table reports the effect of political ideology on relationship-specific investments along the supply chain. The observations are on the supplier-customer-year level.  $CiteNum_{i,j,t+1}$  denotes the log value of one plus the times the focal firm (supplier) i cites customer j's patents in year t+1.  $CiteDum_{i,j,t+1}$  equals one if focal firm (supplier) i cites customer j's patents in year t+1, otherwise zero. The main independent variables of interest,  $Same_{i,j,t}$  and  $Divergence_{i,j,t}$  denote the  $Political\ Ideology\ Score$  of the focal firm i and customer j in year t lie in the same interval on the political ideology spectrum, and the absolute value of their  $Political\ Ideology\ Score$ , respectively.  $Political\ Ideology\ Score$  in year t is calculated with political contribution data in the past four years, i.e., from t-5 to t-1.  $Sup\_R\&D$  denotes the R&D scaled by total asset of the supplier. We include a cluster of firm-level and pair-level control variables for the focal firm and customers, including the natural logarithm of total asset, leverage, ROA, Tobin's Q, and the book-to-market ratio of firm i and j, the focal firm's Herfindahl-Hirschman Index to measure competition, and geographical distance between firms i and j. The detailed definitions of variables can be referred to in Table A1 in the Appendix. All control variables are winsorized at 1% and 99% level. Standard errors are clustered at the supplier-customer level. t-values are shown in parentheses. \*, \*\*, and \*\*\* indicate statistical significance at the 10%, 5%, and 1% level, respectively.

Table 6. Supplier R&D and Political Ideology

		By Number			By Contribution			
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Same	-0.001*	0.000			-0.000	-0.000		
	(-1.86)	(0.15)			(-0.04)	(-0.72)		
$Same \times Cus_R\&D$		-0.018***				0.007		
		(-2.69)				(0.92)		
Divergence			0.004***	0.002*			0.002**	0.003**
			(3.84)	(1.86)			(2.26)	(2.43)
${\bf Divergence}{\bf \times}{\bf Cus\_R\&D}$				0.044**				-0.015
				(2.17)				(-0.91)
Cus_R&D	$0.041^{***}$	0.047***	0.041***	0.030***	$0.041^{***}$	0.039***	0.041***	0.046***
	(4.31)	(4.50)	(4.31)	(2.94)	(4.30)	(4.20)	(4.30)	(3.62)
Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Supplier FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Customer FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
N	95,378	95,378	95,378	95,378	95,378	95,378	95,378	95,378
Adj. $R^2$	0.749	0.749	0.749	0.749	0.749	0.749	0.749	0.749

This table reports the effect of political ideology on supplier's R&D. The observations are on the supplier-customer-year level. The dependent variable is the R&D scaled by total assets of the focal firm (supplier). The main independent variables of interest,  $Same_{i,j,t}$  and  $Divergence_{i,j,t}$  denote the  $Political\ Ideology\ Score$  of the focal firm i and potential customer j in year t lie in the same interval on the political ideology spectrum, and the absolute value of their  $Political\ Ideology\ Score$ , respectively.  $Political\ Ideology\ Score$  in year t is calculated with political contribution data in the past four years, i.e., from t-5 to t-1.  $Cus\_R\&D$  denotes the customer's R&D scaled by total assets. We incorporate a cluster of firm-level and pair-level control variables for the focal firm and potential customers, including the natural logarithm of total asset, leverage, ROA, Tobin's Q, and the book-to-market ratio of firm i and j, the focal firm's Herfindahl-Hirschman Index to measure competition, and geographical distance between firms i and j. The detailed definitions of variables can be referred to in Table A1 in the Appendix. All control variables are winsorized at 1% and 99% level. Standard errors are clustered at the focal firm-potential customer level. t-values are shown in parentheses. \*, \*\*, and \*\*\* indicate statistical significance at the 10%, 5%, and 1% level, respectively.

Table 7. Loan Spread in Supply Chain Loans

	By N	umber	By Con	tribution			
	(1)	(2)	(3)	(4)			
Dependent Variable: Loan Spread							
Same	-5.160** (-2.57)		-2.252 (-1.37)				
Divergence	(-2.51)	10.643** (2.26)	(-1.51)	7.061* (1.78)			
Customer Num	-0.148 (-1.25)	-0.158 (-1.34)	-0.164 (-1.38)	-0.158			
Lender Num	-1.636*** (-3.52)	-1.638***	-1.637***	,			
Controls	Yes	Yes	Yes	Yes			
Year FE	Yes	Yes	Yes	Yes			
Supplier FE	Yes	Yes	Yes	Yes			
Customer FE	Yes	Yes	Yes	Yes			
Loan Purpose FE	Yes	Yes	Yes	Yes			
$N$ Adj. $R^2$	8,291 0.820	8,291 0.820	8,291 0.820	8,291 0.820			

This table reports the effect of political ideology on loan contracts from banks that have loan relationships with both the supplier and customer. The observations are on the supplier-customer-bank-year level. In order to be included in the regression, supplier i and customer j should share the same bank kwith which they have loan relationships. The dependent variable is the loan spread that bank k offers supplier i in year t. The main independent variables of interest,  $Same_{i,j,t}$  and  $Divergence_{i,j,t}$  denote the Political Ideology Score of the focal firm i and customer j in year t lie in the same interval on the political ideology spectrum, and the absolute value of their Political Ideology Score, respectively. Political Ideology Score in year t is calculated with political contribution data in the past four years, i.e., from t-5 to t-1. We incorporate a cluster of firm-level, loan-level, and pair-level control variables for the focal firm and customers, including the natural logarithm of total asset, leverage, ROA, Tobin's Q, and the book-to-market ratio of firm i and j, the focal firm's Herfindahl-Hirschman Index to measure competition, loan amount, collateral loan dummy, revolving loan dummy, expected default frequency, probability of covenant violation, number of total lenders, and geographical distance between firms i and j. The detailed definitions of variables can be referred to in Table A1 in the Appendix. All control variables are winsorized at 1% and 99% level. Standard errors are clustered at the supplier-customer level. t-values are shown in parentheses. \*, \*\*, and \*\*\* indicate statistical significance at the 10%, 5%, and 1% level, respectively.

Table 8. Market Reaction When Contract Made

		By N	umber		Е	By Contr	bution	
	(1) [-1+1]	(2) [-1+3]	(3) [-1+5]	(4) [-3+3]	(5) [-1+1]	(6) [-1+3]	(7) [-1+5]	(8) [-3+3]
	P	anel A: o	n Politic	al Same				
Same	-0.003**	-0.005***	-0.006***	-0.007***	-0.003**	-0.001	-0.001	-0.001
	(-2.35)	(-2.84)	(-2.93)	(-3.61)	(-2.44)	(-0.71)	(-0.55)	(-0.48)
$Same \times TrumpDum$	0.006***	0.007***	0.008***	$0.011^{***}$	0.004**	0.002	0.002	0.003
	(3.13)	(3.01)	(3.09)	(4.15)	(2.38)	(1.06)	(0.61)	(1.12)
Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Supplier Industry FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Customer Industry FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Supplier State	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Customer State	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
N	15,742	15,742	15,742	15,742	15,742	15,742	15,742	15,742
Adj. $R^2$	0.027	0.025	0.029	0.024	0.027	0.025	0.028	0.023
	Pan	el B: on I	Political 1	Divergen	ce			
Divergence	0.010***	0.015***	0.018***	0.014***	0.006**	0.004	0.004	0.001
	(3.24)	(3.77)	(4.17)	(3.29)	(2.24)	(1.27)	(0.93)	(0.18)
$Divergence \times TrumpDum$	-0.012***	-0.014***	-0.015***	-0.018***	-0.011***	-0.004	-0.004	-0.003
	(-3.03)	(-2.84)	(-2.69)	(-3.18)	(-3.01)	(-0.81)	(-0.67)	(-0.51)
Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Supplier Ind FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Customer Ind FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Supplier State	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Customer State	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
N	15,742	15,742	15,742	15,742	15,692	15,692	15,692	15,692
Adj. $R^2$	0.028	0.026	0.029	0.023	0.028	0.025	0.029	0.023

This table reports the market reaction regarding political ideology when supply chain relationships become public. The observations are on the supplier-customer-year level. The dependent variable is supplier i's cumulative abnormal return (CAR) around the time when the supply chain relationship of supplier i and customer j becomes public. The main independent variables of interest,  $Same_{i,j,t}$  denote the Political Ideology Score of supplier i and customer j in year t lie in the same interval on the political ideology spectrum. Political Ideology Score in year t is calculated with political contribution data in the past four years, i.e., from t-5 to t-1.  $TrumpDum_t$  is a dummy variable indicating the Trump period, i.e., 2015-2021. We incorporate a cluster of firm-level and pair-level control variables for the focal firm and customers, including the natural logarithm of total asset, leverage, ROA, Tobin's Q, and the book-to-market ratio of firm i and j, the focal firm's Herfindahl-Hirschman Index to measure competition, and geographical distance between firms i and j. The detailed definitions of variables can be referred to in Table A1 in the Appendix. All control variables are winsorized at 1% and 99% level. Standard errors are clustered at the supplier-customer level. t-values are shown in parentheses. \*, \*\*, and \*\*\* indicate statistical significance at the 10%, 5%, and 1% level, respectively.

Table 9. Political Ideology Convergence Phenomenon

	(1) By Numbe	(2) r By Contribution
Dependent	Variable: I	Political Divergence at $Year_{t+1}$
OnChain	-0.008*** (-5.31)	-0.009*** (-7.77)
Controls	Yes	Yes
Year FE	Yes	Yes
Supplier FE	Yes	Yes
Customer FF	Yes	Yes
$\overline{N}$	858,949	858,949
Adj. $R^2$	0.206	0.334

This table reports the effect of supply chain formation on political ideology. The observations are on the supplier-customer-year level. The dependent variable is the absolute value of  $Political\ Ideology\ Score$  of the focal firm (supplier) and potential customer in year t+1. The independent variable  $OnChain_{i,j,t}$  is a dummy that takes the value of 1 if a pair i-j has a supply chain relationship in year t, and 0 otherwise. We incorporate a cluster of firm-level and pair-level control variables for the focal firm and potential customers, including the natural logarithm of total asset, leverage, ROA, Tobin's Q, and the book-to-market ratio of firm i and j, the focal firm's Herfindahl-Hirschman Index to measure competition, and geographical distance between firms i and j. The detailed definitions of variables can be referred to in Table A1 in the Appendix. All control variables are winsorized at 1% and 99% level. Standard errors are clustered at the supplier-customer level. t-values are shown in parentheses. \*, \*\*, and \*\*\* indicate statistical significance at the 10%, 5%, and 1% level, respectively.

Table 10. Duration and Survival Test

	By N	umber	By Cont	tribution
	(1)	(2)	(3)	(4)
Pa	anel A: E	Ouration		
Same	0.118****		0.005	
	(3.30)		(0.13)	
Divergence		-0.906***		-0.637***
		(-11.99)		(-9.72)
Controls	Yes	Yes	Yes	Yes
Supplier, Customer FE	Yes	Yes	Yes	Yes
N	24,078	24,078	24,078	24,078
Adj. $R^2$	0.404	0.408	0.404	0.406
Pan	el B: Sur	vival Tes	t	
	By N	umber	By Conf	tribution
	CoxPH	Weilbull	CoxPH	Weilbull
Same	-0.121***	-0.111***	-0.063***	-0.071***
	(-8.27)	(-8.49)	(-4.18)	(-5.27)
Controls	Yes	Yes	Yes	Yes
$\overline{N}$	72,642	72,642	72,642	72,642

This table reports the effect of political ideology on the duration and stability of supply chain relationships. In Panel A, the dependent variable is the duration (in years) that a supply chain relationship last. The independent variables are political ideology measures constructed in the same way as in Table 2 but within the entire duration period. In Panel B, we run Cox and Weibull models to test the stability of supply chain relationships, and the dependent variable is a dummy variable that takes the value of 1 if the supply chain relationship snaps in year t, and 0 otherwise. The independent variables of interest are consistent with the political ideology measures in Table 2. We treat relationships that exist until the last year of the sample period as right censored and adjust for the fact that some relationships have existed before they come under observation in our sample period. Columns 1 and 2 use the political ideology measures calculated by employee numbers, while Columns 3 and 4 use the political ideology measures calculated by political contributions.

Table 11. The Probability To be the Supplier (Cross Sectional)

	(1)	(2)	(3)	(4)
	, ,	umber	` /	tribution
	(1)	(2)	(3)	(4)
Panel	A: On D	istance		
Distance	-0.003***	-0.002***	-0.002***	-0.002***
	(-15.49)	(-9.35)	(-15.51)	(-8.72)
Same	0.002***		$0.001^{***}$	
	(5.24)		(3.37)	
Same $\times$ Distance	0.001***		0.000	
	(4.04)		(1.38)	
Divergence		-0.007***		-0.004***
Di Di		(-7.34)		(-5.01)
Divergence $\times$ Distance		-0.003***		-0.002***
C 1	3.7	(-4.43)	3.7	(-3.70)
Controls Vacan Control on Control on FE	Yes	Yes	Yes	Yes
Year, Supplier, Customer FE	Yes	Yes	Yes	Yes
N	$973,\!673$	973,673	973,673	$973,\!673$
$Adj. R^2$	0.078	0.078	0.078	0.078
Panel B: On Su	ıpplier's	Firm Ass	et Size	
Sup Asset	0.001	0.002***	0.001**	0.001**
~ ~ <u>_</u>	(1.46)	(2.96)	(2.22)	(2.37)
Same	0.002***	()	0.001***	( )
	(4.95)		(3.31)	
$Same \times Sup Asset$	0.002***		0.001***	
<b>*</b> —	(8.57)		(4.18)	
Divergence	, ,	-0.007***	, ,	-0.004***
		(-7.95)		(-5.09)
$Divergence \times Sup\_Asset$		-0.001**		0.000
		(-2.43)		(0.79)
Controls	Yes	Yes	Yes	Yes
Year, Supplier, Customer FE	Yes	Yes	Yes	Yes
N	973,673	973,673	973,673	973,673
Adj. $R^2$	0.078	0.078	0.078	0.078
Panel C:	On Supp	lier's HH	I	
Sup HHI	-0.005	-0.010**	-0.007	-0.007*
- <del>-</del>	(-1.12)	(-2.39)	(-1.56)	(-1.65)
Same	0.002***	, ,	0.001***	, ,
	(5.14)		(3.30)	
$Same \times Sup\_HHI$	-0.005**		0.001	
	(-2.51)		(0.27)	
Divergence		-0.007***		-0.004***
_		(-7.76)		(-5.22)
$Divergence \times Sup\_HHI$		0.016***		0.003
		(3.87)		(0.71)
Controls	Yes	Yes	Yes	Yes
Year, Supplier, Customer FE	Yes	Yes	Yes	Yes
N	973,673	973,673	973,673	973,673

Adj. $R^2$	0.078	0.078	0.078	0.078		
Panel D: On Supplier's ROA						
Sup_ROA	-0.003	0.001	-0.003*	0.002		
	(-1.33)	(0.59)	(-1.68)	(0.92)		
Same	0.002***		0.001***			
	(5.14)		(3.29)			
$Same \times Sup ROA$	0.007***		0.011***			
	(3.07)		(4.78)			
Divergence		-0.007***		-0.004***		
		(-7.71)		(-5.27)		
$Divergence \times Sup_ROA$		-0.006		-0.007*		
		(-1.31)		(-1.83)		
Controls	Yes	Yes	Yes	Yes		
Year, Supplier, Customer FE	Yes	Yes	Yes	Yes		
$\overline{N}$	973,673	973,673	973,673	973,673		
Adj. $R^2$	0.078	0.078	0.078	0.078		

This table reports the heterogeneity effect of political ideology on the matching between suppliers and customers. The observations are on the supplier-customer-year level. The dependent variable  $OnChain_{i,j,t}$ is a dummy that equals 1 if the focal firm i (supplier) and potential customer j form a supply chain relationship in year t, 0 if the firm j is not a customer of the focal firm i and is disclosed as a competitor by i's real customers. The main independent variables of interest,  $Same_{i,j,t}$  and  $Divergence_{i,j,t}$  signify the Political Ideology Score of the focal firm i and potential customer j in year t lie in the same interval on the political ideology spectrum, and the absolute value of their *Political Ideology Score*, respectively. Political Ideology Score in year t is calculated with political contribution data in the past four years, i.e., from t-5 to t-1. We interact four variables with political ideology measures: log value of one plus geographical distance of pair i-j, focal supplier i's log total asset, focal supplier i's HHI, and focal supplier i's ROA. These variables are center-processed around zero. We incorporate a cluster of firm-level and pair-level control variables for the focal firm and potential customers, including leverage, Tobin's Q, and the book-to-market ratio of firm i and j. The detailed definitions of variables can be referred to in Table A1 in the Appendix. We require each focal supplier to form at least one supply chain relationship in year t. We only keep the first-time matching in the sample to avoid bias from past relationships, i.e., if firm j becomes supplier i's customer in year t, then the i-j pair is removed from regression in all the future years after year t. All control variables are winsorized at 1% and 99% level. Standard errors are clustered at the supplier-customer level. t-values are shown in parentheses. \*, \*\*, and \*\*\* indicate statistical significance at the 10%, 5%, and 1% level, respectively.

Table A.1. Key Variables and Definitions

Variables	Definitions
Political ideology rela	ated variables
Same	An indicator equalling 1 of whether <i>Political Ideology Score</i> (by Number or by Contribution) for a pair of supplier and customer lie in the same interval on the political ideology spectrum, i.e., 0-0.2, 0.2-0.4, 0.4-0.6, 0.6-0.8, 0.8-1, and 0 otherwise.
Divergence	The absolute value of the difference of <i>Political Ideology Score</i> for a pair of supplier and customer.
Supply chain relation	
OnChain	An indicator of the customer is a real customer of the supplier, rather than a counterfactual customer, which is constructed based on the sup- plier's competitors.
Distance	The geographical distance between supplier and customer.
Supplier characterist	
Sup Ln(TotalAsset)	Supplier's log value of total asset.
Sup_Leverage	Supplier's leverage ratio, i.e., total liabilities scaled by total common equity.
Sup ROA	Supplier's return on asset, i.e., net income scaled by total asset.
Sup_HHI	Supplier's Herfindahl-Hirschman Index to measure competition, i.e., the sum of squared market share of a 4-digit SIC industry in a given year. Market share is the fraction of total sales scaled by summing up the overall sales in the 4-digit SIC industry.
$Sup\_TobinQ$	Supplier's Tobin's Q, i.e., total asset less total common equity plus market price times total shares outstanding, divided by the total asset.
$Sup\_BTM$	Supplier's book-to-market ratio, i.e., total common equity scaled by market price times total shares outstanding.
Sup_R&D	Supplier's Research and Development Investment. We scale R&D expenses by the book value of total assets and replace it with industry mean if R&D is missing.
Customer characteris	
Cus Ln(TotalAsset)	Customer's log value of the total asset.
Cus_Leverage	Customer's leverage ratio, i.e., total liabilities scaled by total common equity.
Cus_ROA	Customer's return on asset, i.e., operating income after depreciation scaled by total asset.
Cus_BTM	Customer's book-to-market ratio, i.e., total common equity scaled by market price times total shares outstanding.
$Cus\_TobinQ$	Customer's Tobin's Q, i.e., total asset less total common equity plus market price times total shares outstanding, divided by total asset.
Cus_R&D	Customer's Research and Development Investment. We scale R&D expenses by the book value of total assets and replace it with industry mean if R&D is missing.
Cus AR	Log value of accounts receivable of customers.
Cus Sales	Log value of total sales of customers.
Others	
Distance	The geographical distance between the headquarters of the supplier and customer
CiteNum	The log value of one plus the times the focal firm (supplier) $i$ cites customer $j$ 's patents in application year $t+1$ .
	Continued on next page

Table A.1 Continued from previous page

Variables	Definitions
CiteDum	Equals one if the focal firm (supplier) $i$ cites customer $j$ 's patents in
	application year $t+1$ , otherwise zero.
SupPatentNum	Supplier's amount of patents filed application.
CusPatentNum	Customer's amount of patents filed application.
$Sup\_TR\_Pert$	The percentage of customer-specific account receivables (trade credit)
	disclosed by suppliers in 10-K filing.
Sale_Pert	The percentage of customer-specific sales disclosed by suppliers in 10-K
	filing, filled with 10% (the threshold of mandatory disclosure) if it is
	missing (such as "-", " $<10\%$ ", or "less than $10\%$ ").
Sup_CAR	Supplier's cumulative abnormal return when the supply chain relation-
	ship is made.
TrumpDum	A dummy indicating the Trump period, i.e., 2015-2021.

Table A.2. Supplier Patent and Political Ideology

	By Number		By Contribution						
	(1)	(2)	(3)	(4)					
Dependent Variable: Supplier's Patent Number $_{t+1}$									
Same	-0.028***		-0.015*						
	(-3.29)		(-1.70)						
Divergence		0.045**		0.024					
		(2.15)		(1.32)					
${\bf CusPatentNum}_t$	-0.028***	-0.028***	-0.028***	-0.028***					
	(-4.41)	(-4.39)	(-4.41)	(-4.40)					
$Sup_R&D$	$0.127^{*}$	0.126*	$0.129^{*}$	0.128*					
	(1.93)	(1.92)	(1.95)	(1.94)					
$Cus_R\&D$	-0.153*	-0.155*	-0.155*	-0.155*					
	(-1.81)	(-1.83)	(-1.84)	(-1.84)					
Controls	Yes	Yes	Yes	Yes					
Year FE	Yes	Yes	Yes	Yes					
Supplier FE	Yes	Yes	Yes	Yes					
Customer FE	Yes	Yes	Yes	Yes					
$\overline{N}$	95,378	95,378	95,378	95,378					
Adj. $R^2$	0.840	0.840	0.840	0.840					

This table reports the effect of political ideology on the innovation outputs along the supply chain. The observations are on the supplier-customer-year level. The dependent variable is the log value of one plus the total number of patents filed by the focal firm (supplier) i in year t+1. The main independent variables of interest,  $Same_{i,j,t}$  and  $Divergence_{i,j,t}$  denote the  $Political\ Ideology\ Score$  of the focal firm i and customer j in year t lie in the same interval on the political ideology spectrum, and the absolute value of their Political Ideology Score, respectively. Political Ideology Score in year t is calculated with political contribution data in the past four years, i.e., from t-5 to t-1. CusPatentNum<sub>t</sub> denotes the log value of one plus the total number of patents filed by customer j in year t. Sup R&D and Cus R&Dare the R&D scaled by total assets for suppliers and customers, respectively. We incorporate a cluster of firm-level and pair-level control variables for the focal firm and customers, including the natural logarithm of total asset, leverage, ROA, Tobin's Q, and the book-to-market ratio of firm i and j, the focal firm's Herfindahl-Hirschman Index to measure competition, and geographical distance between firms i and j. The detailed definitions of variables can be referred to in Table A1 in the Appendix. All control variables are winsorized at 1% and 99% level. Standard errors are clustered at the supplier-customer level. t-values are shown in parentheses. \*, \*\*, and \*\*\* indicate statistical significance at the 10%, 5%, and 1% level, respectively.

Table A.3. Total Sales

	By Number		By Contribution		
	(1)	(2)	(3)	(4)	
Same	0.007***		0.001		
	(3.87)		(0.90)		
Divergence		-0.024***		-0.008**	
		(-4.90)		(-2.09)	
$Cus\_Sales$	$0.053^{***}$	0.053***	$0.053^{***}$	0.053***	
	(8.37)	(8.39)	(8.39)	(8.39)	
Controls	Yes	Yes	Yes	Yes	
Year FE	Yes	Yes	Yes	Yes	
Sup FE	Yes	Yes	Yes	Yes	
Cus FE	Yes	Yes	Yes	Yes	
$\overline{N}$	86,468	86,468	86,468	86,468	
Adj. $R^2$	0.918	0.918	0.918	0.918	

This table reports the effect of political ideology on the total sales along the supply chain. The observations are on the supplier-customer-year level. The dependent variable is the log value of total sales of the supplier. The main independent variables of interest,  $Same_{i,j,t}$  and  $Divergence_{i,j,t}$  denote the  $Political\ Ideology\ Score$  of the focal firm i and potential customer j in year t lie in the same interval on the political ideology Score in year t is calculated with political contribution data in the past four years, i.e., from t-5 to t-1.  $Cus\_Sales$  is the log value of total sales of the customer. We incorporate a cluster of firm-level and pair-level control variables for the focal firm and customers, including the natural logarithm of total asset, leverage, ROA, Tobin's Q, and the book-to-market ratio of firm i and j, the focal firm's Herfindahl-Hirschman Index to measure competition, and geographical distance between firms i and j. The detailed definitions of variables can be referred to in Table A1 in the Appendix. All control variables are winsorized at 1% and 99% level. Standard errors are clustered at the supplier-customer level. t-values are shown in parentheses. \*, \*\*, and \*\*\* indicate statistical significance at the 10%, 5%, and 1% level, respectively.

Table A.4. TobinQ and Political Ideology

	By Number		By Con	tribution				
	(1)	(2)	(3)	(4)				
Dependent Variable: Supplier's Tobin's Q								
Same	-0.017		0.000					
	(-1.42)		(0.02)					
$Same \times TrumpDum$	0.093***		0.058***					
•	(6.05)		(3.70)					
Divergence	,	0.114***	( /	0.052**				
9		(3.78)		(1.98)				
$Divergence \times TrumpDum$		-0.193***		-0.100***				
-		(-5.36)		(-3.07)				
Controls	Yes	Yes	Yes	Yes				
Year FE	Yes	Yes	Yes	Yes				
Supplier FE	Yes	Yes	Yes	Yes				
Customer FE	Yes	Yes	Yes	Yes				
$\overline{N}$	95,378	95,378	95,378	95,378				
Adj. $R^2$	0.777	0.777	0.777	0.777				

This table reports the effect of political ideology on Tobin's Q of suppliers. The observations are on the supplier-customer-year level. The dependent variable is Tobin's Q of the focal firm (supplier). The main independent variables of interest,  $Same_{i,j,t}$  and  $Divergence_{i,j,t}$  denote the  $Political\ Ideology\ Score$  of the focal firm i and potential customer j in year t lie in the same interval on the political ideology Score in year t is calculated with political contribution data in the past four years, i.e., from t-5 to t-1. TrumpDum is a dummy variable indicating the Trump period, i.e., 2015-2021. We incorporate a cluster of firm-level and pair-level control variables for the focal firm and potential customers, including the natural logarithm of total asset, leverage, ROA, Tobin's Q, and the book-to-market ratio of firm i and j, the focal firm's Herfindahl-Hirschman Index to measure competition, and geographical distance between firms i and j. The detailed definitions of variables can be referred to in Table A1 in the Appendix. All control variables are winsorized at 1% and 99% level. Standard errors are clustered at the focal firm-potential customer level. t-values are shown in parentheses. \*, \*\*, and \*\*\* indicate statistical significance at the 10%, 5%, and 1% level, respectively.