

Investing in influence: Investors, portfolio firms, and political giving

Marianne Bertrand, Matilde Bombardini,
Raymond Fisman, Francesco Trebbi, and Eyub Yegen*

June 2025

Abstract

We examine how the rise of institutional ownership has influenced firms’ political activities. We find that, after the acquisition of a large stake, a firm’s political action committee giving mirrors more closely that of the acquiring investor. Consistent with a causal interpretation, this pattern is also observed for acquisitions driven by new index inclusions. The pattern is stronger when firms’ management faces contentious proposals in shareholder meetings and may thus need institutional investors’ support. We further show that firms’ giving shifts away from business-relevant politicians and is strongly aligned with the individual campaign donations of the institutional investors’ employees. These results, together with the finding that the effects are larger for more “partisan” and privately owned investors, suggest that the influence we uncover is driven by institutional investors’ own political views, rather than a profit-maximizing strategy for the portfolio firms.

*Bertrand: University of Chicago Booth School of Business, NBER and CEPR; Bombardini: UC Berkeley Haas School of Business, NBER and CEPR; Fisman: Boston University and NBER; Trebbi: UC Berkeley Haas School of Business, NBER and CEPR; Yegen: Hong Kong University of Science and Technology. We would like to thank participants at the Stanford - Hoover Institute Inaugural Conference of the Working Group on Corporate Governance, NBER Conference on Economics and Politics of Mega-Firms, CEPR Conference on the Politics of Regulation and Central Banking, CEPR Conference on Ownership, Governance, Management and Firm Performance, IOG-BFI Spring Conference, Strategy and the Business Environment Conference, EFA Annual Meetings, MFA Annual Meetings, FMA Annual Meetings, CICF Annual Meetings, GRASFI Conference, Global Corporate Governance Colloquium at Yale, Bank of Finland Workshop on Finance and Politics, Workshop on Interest Groups, and seminar participants at Harvard Business School, Harvard Law School, Stanford GSB, Chicago Booth, Chicago Harris, UC Berkeley Haas, UC Berkeley Political Science, UCSD, Virginia, Washington Foster, Georgetown, George Mason, Florida, Tsinghua, Sao Paulo School of Economics, Santa Clara, Alberta, Quebec, Toronto, HKUST, the Federal Reserve of Atlanta and other institutions for comments.

1 Introduction

Over the past seventy years, institutional investors’ ownership of publicly traded U.S. companies has increased dramatically, from just 6 percent in 1950 to 65 percent in 2017 (Bebchuk and Hirst, 2019). This increase, combined with economies of scale and other structural forces in the financial services industry, has put a large share of the U.S. economy in the hands of a relatively small number of asset management companies. The “Big Three” of BlackRock, Vanguard, and State Street, for example, held more than 20 percent of S&P 500 shares in 2017 as compared to 5 percent in 1998 (Bebchuk and Hirst, 2019).

This sea change in the ownership of U.S. corporations has prompted discussions among academics and policymakers over its consequences. The rise of a concentrated layer of institutional investors between dispersed owners and corporations has brought about a new agency problem (Jensen and Meckling, 1976; Bebchuk et al., 2017), as fund managers and owners of financial services firms may have objectives that differ from those of their clients, i.e., the individuals and organizations that invest through them. Indeed, just as the CEO of a widely held corporation may extract private benefits from their control of the corporation, the managers and owners of financial services firms may be able to extract private benefits from their control of much of the U.S. stock market despite coming to this control position “as a side effect, largely unintended or even known to their own economic principals (i.e., index investors)” (Coates, 2018).

Famously, after BlackRock CEO Larry Fink urged chief executives in 2018 to “make a positive contribution to society,” the financial press observed that BlackRock could apply pressure even via its index fund holdings, as those gave BlackRock (and Fink as its CEO) enough ownership to affect votes on board appointments or other agenda items of relevance to top managers.¹ While Fink framed his comments in terms of long-term shareholder maximization, the subsequent discussion raised the concern that asset managers – who effectively control the votes of the funds they manage – have the potential to derive benefits from their position of control in ways that serve their own interests and preferences rather than those of their clients.

While there is a lively debate over how actively institutional investors monitor portfolio firms’ efforts to maximize profits and hence returns for their clients,² relatively little attention has been

¹The letter may be found here: <https://corpgov.law.harvard.edu/2018/01/17/a-sense-of-purpose/> (last accessed June 3, 2025). In his letter, Fink wrote explicitly that BlackRock would not necessarily seek change via divestment. See, e.g., “BlackRock C.E.O. Larry Fink: Climate Crisis Will Reshape Finance,” Andrew Ross Sorkin, *New York Times*, January 14, 2020 for a discussion of how BlackRock would use its influence via passive index funds to influence corporations’ agendas.

²On one side of this debate, some have argued that the replacement of small dispersed owners by large institutional investors may reduce the standard agency problem of the Berle and Means (1932) corporation. This shift may improve welfare if active, concentrated shareholders primarily act as effective monitors of management at the level of the portfolio firm. This change may also, as some in the common ownership literature have argued, reduce welfare if control is used to maximize profits across all (possibly competing) firms in concentrated shareholders’

paid to the private benefits institutional investors may derive from their role as investment agents. This is the question we take on in this paper.

Benefits for managers and owners of asset management companies can come in many forms, some more mundane than others. For example, CEOs may feel compelled to “wine and dine” the senior management of their large institutional investors, especially when corporate leaders are hoping for investors’ support in a vote on a contentious shareholder proposal or with a new director appointment. Benefits could also take the form of preferential access to jobs for relatives at portfolio firms. The type of benefit we focus on in this paper is, we argue, of greater societal significance: political influence. Just as the common ownership literature has raised questions related to the concentration of economic power with the rise of institutional investing (Azar and Vives, 2021; Anton et al., 2022), we ask whether the rise in institutional ownership should also raise questions related to the concentration of political power.

In particular, we study whether portfolio firms’ political giving is affected by the political preferences of their institutional investors. We do so by examining changes in portfolio companies’ political action committee (PAC) spending around block purchases in those companies by institutional investors. More precisely, we examine how the relationship between the PAC giving of an investor and the PAC giving of a portfolio firm changes when the investor first acquires a large stake ($> 1\%$) in that firm.

In our first set of results, we find that the likelihood that an investor and a firm both give to a specific politician is substantially higher after the investor acquires a large stake in that firm. In our preferred specification, which includes a saturated set of fixed effects, we find that the probability that a firm’s PAC donates to a politician supported by an investor’s PAC increases by 31 percent after an acquisition.

Money in politics research is typically plagued by identification problems due to omitted confounders that may drive political giving.³ In our setting, acquisitions could be driven by unobserved factors that are correlated with a convergence in the political interests of the firm and the acquir-

portfolios (Azar and Vives, 2021; Anton et al., 2022). Others have observed that institutional investors – and especially those managing index funds or “closet indexer” active funds – lack the financial incentives to be active monitors of management, given their fee structures and business model (Bebchuk et al., 2017). Proponents of this latter view often highlight how few resources even the largest institutional investors spend on stewardship activities for the companies in their portfolios.

³The determinants of corporate political giving have been the subject of substantial research. Early examples include Masters and Keim (1985), Burris (1987), and Snyder Jr (1990), which look at the determinants of PAC presence and size among Fortune-ranked corporations during 1981-1982, 1976-1980, and 1980-86 respectively, and Stratmann (2005), which provides an early overview. Bombardini (2008) focuses on the productivity of political giving and Bombardini and Trebbi (2012) on the interaction of giving and electoral mobilization. Some main take-aways from this earlier work are that larger companies and those in sectors more heavily involved with government (either via contracting or regulation) are more likely to have PACs. Similar patterns are observed in lobbying decisions; see Tripathi et al. (2002) for early work, and more recent investigations by Kerr et al. (2014) and Kang (2016). See Bombardini and Trebbi (2020) and de Figueiredo and Richter (2014) for reviews.

ing investor. Also, it is possible that the results described above stem from active institutional investors trying to attract clients with particular political leanings by donating to client-favored politicians, and also by pressuring portfolio companies to donate to these client-favored politicians.⁴ In this case, a conclusion of rising political influence in the hands of asset managers would be unwarranted, as they are simply acting on the political preferences of their (dispersed) principals.

To address these challenges, we turn to a subset of investors and acquisition events that are less affected by such confounds. Specifically, we restrict our sample of asset management companies to passive investors and, following [Boller and Morton \(2020\)](#), focus on a subsample of acquisitions due to stock index inclusions (i.e., a firm being added to, say, the S&P 500 or the Russell 2000 Index). The increased correlation between firm PAC and investor PAC giving is also observed for block purchases that result from such index inclusions among passive investors. We further argue that index funds are, with some exceptions, least apt to attract investors based on principles or ideology – the fund’s objective is simply to track the returns of a market index, such as the S&P 500.⁵ Hence, particularly in this subsample, the post-acquisition increase in co-movement of investor-firm PAC giving is unlikely to reflect the preferences of the ultimate shareholders.

We provide more direct evidence of investors changing the giving behavior of the portfolio firms they take a financial stake in, rather than portfolio firms influencing investors’ political giving. To do this, we construct cosine similarity measures for each entity (firm or investor) between adjacent congressional cycles around the acquisition. Intuitively, these persistence measures capture the extent to which the profile of political giving of a firm or investor across congressional districts experiences unusually large (or small) shifts between the two congressional cycles around a block purchase. If a firm adjusts its giving to investor preferences, we expect a relatively larger drop in similarity for the firm around the acquisition date. If instead the investor adjusts its giving to that of the firm, we expect the opposite. We show that around the block purchase congressional cycle, firms experience a relative drop in their across-period giving similarity, as compared to that of investors. These results lead us to interpret our main results as reflecting the adjustment of firm giving to investor preferences, rather than the converse.

We then turn to mechanisms, exploring both *why* and *how* investor political influence takes place. Our first set of analyses are inspired by the qualitative discussion provided by [Coates \(2023\)](#)

⁴For example, Engine No.1, a social-impact-focused fund that attracted attention for its campaign to replace ExxonMobil board members in 2021, may attract environmentally conscious clients by donating to “green” politicians themselves, and also pressuring acquired companies to do the same.

⁵In fact, index funds can be *forced* to maintain ownership in stocks that investors might otherwise wish to divest. For example, shortly after the Larry Fink announcement described above, BlackRock sold off stakes in gun manufacturers in its more actively managed funds, but was forced to keep them in some passive (index) funds, because gunmakers were in the particular indices they tracked. See, e.g., “BlackRock Ends Up in an Awkward Place on Guns,” Matt Levine, *Bloomberg*, April 8, 2018.

as well as the survey evidence in [McCahery et al. \(2016\)](#). Both papers argue that the incentives of executives to cater to the preferences – political or otherwise – of investors will be greater when management faces more a contentious relationship with some shareholders. It is at such times that management might be particularly motivated to garner support from large institutional investors (and their many votes). In support of this mechanism, we find that the post-acquisition correlation between portfolio firms’ and investors’ political giving is larger in cycles when the portfolio firm is faced with at least one shareholder proposal, and especially so for shareholder proposals on topics that have historically drawn large support among shareholders. Similarly, we find stronger post-acquisition correlation in political giving in cycles that include management proposals in shareholder meetings on topics that have historically drawn more opposition from shareholders.⁶

Turning to the motivations of investors, we distinguish between two main possibilities: personal political preferences and profit motives. We present three sets of results that collectively suggest that political preferences may be an important motivation. Specifically, we show that firms’ political giving shifts away from strategically important politicians as institutional investors acquire a larger ownership share, which suggests a substitution toward less profit-oriented political activities. Also, we show that the co-movement between investor and firm PAC giving is higher for more “partisan” institutional investors, which we take as an indication that their political activities are governed more by ideological than strategic motives. Finally, we report an increase in the co-movement of institutional investor’s individual employee giving and portfolio firm PAC giving after an acquisition. We again interpret this finding as suggesting that personal preferences matter: while employee and PAC giving are correlated, the former is plausibly a stronger reflection of individual employees and managers’ own political preferences.

We then turn to consider how political preferences are conveyed by the institutional investor to portfolio firms. There is no systematic data on what [Coates \(2023\)](#) describes as “engagement” opportunities, i.e., when investors may convey directly to company representatives any concerns they have about how the company is run. However, we can observe institutional investors’ employees gaining a seat on the board of portfolio companies. Consistent with board representation offering an institutional investor a more active voice, we show that the correlation in political giving increases even more sharply after the investor gets a seat on the board.

Overall, our results suggest that the political preferences of a limited number of asset management companies are amplified as they gain control in U.S. corporations as agents of their dispersed (and most likely – at least in the case of index funds – oblivious) clients. Although we have no direct evidence regarding the welfare implications of these patterns, it is unlikely that

⁶It is possible that support from institutional investors may also help preempt a contentious proposal. Consistent with this view, we find similar results in congressional cycles when the portfolio firm had at least one controversial ESG incident.

the amplification of the political preferences of a relatively small number of individuals is socially beneficial.

Related literature Our work sits at the intersection of research on money and influence in politics, and research on institutional ownership. While there is a vast literature in each of these separate areas, to our knowledge, no prior work has quantitatively looked at the link between the two. In fact, despite their considerable wealth and potential influence, we know of no prior work that examines the political activities of institutional investors.

More generally, our paper contributes to a larger literature, active in both economics and political science, that studies the determinants and consequences of corporate political influence for government policy, and more broadly discusses the role of money in politics in the U.S. and beyond (e.g., [Drutman, 2015](#); [Walker and Rea, 2014](#)). Corporate influence activities have been documented across a range of channels (e.g., [Bertrand et al., 2020](#); [Bombardini and Trebbi, 2011](#)), in both legislative and regulatory domains ([Bertrand et al., 2021](#)), and at various levels of government ([Thieme, 2020](#)). Prior work – including those cited above – has generally taken firms’ influence-seeking activities as guided by profit maximization – an extension of firms’ business interests to non-market strategies. This profit motive has been largely assumed in recent legal doctrine.⁷ The benchmark of corporate political “speech” driven solely by profit may, however, be an overly simplified view of how corporations are governed. Recent research suggests instead that a firm’s political behavior and orientation may be the result of a richer interaction amongst the interests and influence of various stakeholders – including top managers, large shareholders, and board members – that hold diverse political views. While some earlier work documents some degree of alignment amongst these various parties – in particular the overlap between executives’ political giving and their firms’ PAC giving ([Teso, 2022](#); [Richter and Werner, 2017](#)), others have highlighted the relatively partisan nature of CEO political contributions (e.g., [Bonica, 2016](#)). The partisanship of executives and employees has, in turn, led to an increased polarization of political orientation across firms as a result of manager and worker sorting ([Fos et al., 2022](#); [Colonnelli et al., 2022](#)), with real consequences for firm-level decisions (e.g., international investment, as in [Kempf et al., 2023](#)) and ultimately for firm value ([Fos et al., 2022](#)).⁸

These recent contributions highlight the complex interplay between firms’ political objectives and executives’ political orientations. In this paper, we further emphasize the need to consider institutional ownership as playing a key role in determining businesses’ political activities. This

⁷For example, in the 2010 Supreme Court’s landmark *Citizens United v. FEC* decision, Justice Anthony Kennedy wrote that, “shareholders can determine whether their corporation’s political speech advances the corporation’s interest in making profits...and react to the speech of corporate entities in a proper way.”

⁸[Tahoun et al. \(2023\)](#) similarly find executive sorting, and further show that politically opposed executives that are hired by the firm do so with higher pay and steeper incentive contracts.

is especially true when, as emphasized by [Bolton et al. \(2020\)](#) and as we document below, institutional investors vary substantially in their ideological positions.

The literature on influence also includes many attempts at estimating the returns to PAC donations. Findings are mixed (see, e.g., [Fowler et al., 2020](#), for a discussion) perhaps owing both to the empirical challenges involved, and also, as we suggest in this paper, the range of objectives that might be served by corporate political giving.

Finally, we contribute to the literature on the role of institutional investors in determining firm outcomes (see, e.g., [Gompers and Metrick, 2001](#); [Gabaix et al., 2006](#); [Aghion et al., 2013](#); [McCahery et al., 2016](#); [Bebchuk et al., 2017](#); [Dyck et al., 2019](#); [López and Vives, 2019](#); [Yegen, 2020](#)) by documenting that institutional investors have an influence on portfolio firms’ political decisions. This topic has taken on particular relevance, given concerns over the consequences – anti-competitive and otherwise – of common ownership of firms by a given institutional investor ([Posner et al., 2017](#); [Schmalz, 2018](#)). Much of the debate in the common ownership literature centers on the extent to which asset managers have strong enough financial incentives to use their control to engineer some coordination between competing portfolio firms, even when such coordination would be required if portfolio managers took their fiduciary duty to their clients seriously ([Backus et al., 2019](#)).

Recent work has shown that some institutional investors are in fact active in corporate governance. However, much of this research focuses on so-called activist hedge funds (e.g., [Brav et al., 2018](#)). Our findings suggest that even index-based investors have influence over decisions at portfolio firms, a point that some recent work has cast doubts on ([Heath et al., 2022](#)), and one that has particular importance in a literature in which the question of whether greater passive ownership has any effect on managerial decisions remains unsettled ([Brav et al., 2022](#)). While we focus on the political margin of firm decisions, our findings confirm the *potential* for asset managers to exercise influence – derived from their ever-larger holdings – more generally (though as noted by [Corum et al., 2021](#), this may depend on the broader composition of ownership, a point we return to below).

Also (and potentially at odds with prior literature), our findings suggest that institutional investors’ interests may not be aligned with their fiduciary duty to their clients. Prior work has tended to emphasize the role that institutional investors may play in disciplining management for the benefit of portfolio firm profitability ([Lewellen and Lewellen, 2022](#)), rather than the benefits of fund managers. To the extent that scholars have considered the use of control to serve the fund, the focus has been on the anti-competitive effects of common ownership, which remains a much-debated topic ([Azar and Vives, 2021](#); [Backus et al., 2019](#); [Boller and Morton, 2020](#)). By contrast, our findings suggest that these investors may leverage the control they inherit as agents to their clients to their own benefits.

The paper is organized as follows. Section 2 describes the data, sample construction and the main variables used in the analysis. Section 3 presents our main empirical results linking political donations by investors and their portfolio firms. Section 4 investigates the mechanisms that underlie this relationship. We conclude in Section 5.

2 Data and Variables Construction

2.1 Data Sources and Sample Construction

Our starting sample of institutional investors is the set of all 13-F investors, i.e., those that manage at least \$100 million in assets and are thus required by the Securities and Exchange Commission (SEC) to disclose their portfolio holdings at the end of each quarter (via 13-F reports), over the period 1980 to 2018. Our starting sample of portfolio firms includes all public companies that appear at least once in one of the 13-F investors' portfolios over that sample period and that can be matched to database provided by the Center for Research in Security Prices (CRSP), a provider of detailed financial data on publicly traded companies. To generate this set of portfolio firms, we use the Thomson-Reuters' dataset on investors' portfolios, which contains, at the quarterly level, the number of shares held by institutional investors in their portfolio firms, the portfolio firms' CRSP stock prices, and the portfolio firms' total outstanding shares held.⁹ Some data are missing from Thomson-Reuters. To fill these gaps for the post-2012 period, we adopt the code provided by Wharton Research Data Services (WRDS) to construct the ownership levels in the year 2012 and later.¹⁰ For the pre-2012 period, we manually obtain the missing holdings data directly from SEC Edgar. We follow the approach of [Lewellen and Lewellen \(2022\)](#) and aggregate the 13-F holdings data to the level of the parent (e.g., we aggregate all BlackRock funds) since these funds are reported in the same parent's 13-D and 13-G files. After this procedure, we obtain a dataset with 9,639 13-F investors and 28,284 portfolio firms.¹¹

We link both investors and portfolio firms to their political donations. To do so, we match by name each organization (i.e., investor or firm) to PACs in the Federal Election Commission (FEC) records, using a combination of fuzzy matching algorithms and manual matching.¹² We identify

⁹The Institutional (13-F) Holdings - S34 dataset was downloaded from <https://wrds-www.wharton.upenn.edu/pages/get-data/thomson-reuters/institutional-13f-holdings-s34>, via WRDS subscription.

¹⁰The code provided by WRDS may be accessed via https://wrds-www.wharton.upenn.edu/documents/533/Research_Note_-Thomson_S34_Data_Issues.pdf and the data can be found at <https://wrds-www.wharton.upenn.edu/pages/get-data/wrds-sec-analytics-suite/> via WRDS subscription. For further details, please see [Yegen \(2019\)](#) for a detailed discussion of the missing ownership data issue.

¹¹These correspond to 67,342 unique historical CUSIP codes because a firm's CUSIP can change over time.

¹²In particular, after removing the sample of Fortune 500 and S&P 500 firms for which PAC linkages had already been performed by [Bertrand et al. \(2014\)](#) and [Bertrand et al. \(2020\)](#), we standardize the names of the remaining organizations and PACs by removing common legal abbreviations, such as Inc. and Incorporation. We then use the

574 investors and 2,456 portfolio firms with a PAC.

Having created a link from firms and investors to PAC IDs, it is then straightforward to further link both firms and investors to their campaign contributions to specific candidates in each two-year congressional cycle.¹³ Finally, firm and investor contributions to candidates are linked to constituencies using the MIT Election Data files, which we further use to limit our donations data to winners in House of Representatives races, as in [Bertrand et al. \(2020\)](#).¹⁴

Since our main specification entails observations at the investor-firm-congressional district-congressional cycle level, we face the problem of an excessively large data set.¹⁵ Restricting attention to the set of politically active firms (2,456) is not sufficient to obtain a tractable size ($9,639 \times 2,456 \times 19 \times 435 = 196$ billion), so we consider only firm-investor pairs that become linked at some point over the sample period by a large acquisition event.¹⁶ For this sample, whenever we do not observe any PAC giving, either by a firm or an investor, we set it equal to zero, since the Federal Election Commission data reports the universe of federal campaign donations, so if the donation is not in the dataset, this means it is (legally) zero.

Since the PAC data are at the (two-year) congressional cycle level, we identify large acquisition events at the same frequency (19 congressional cycles over the period 1980 to 2018). In particular, in the Thomson-Reuters' data, we average the fraction of outstanding shares of portfolio firm f held by investor i in a given quarter over the 8 quarters in each congressional cycle t . We pair a given investor in the Cartesian product to the set of portfolio firms that: (i) were absent from the investor's portfolio at the beginning of the sample period; and (ii) in which the investor acquired at least one percent of outstanding shares in an congressional cycle.¹⁷

To construct a sample of acquisitions that is relatively unaffected by endogeneity concerns, we focus on the subset of acquisitions that are driven by index inclusions. Given that our ownership (and PAC giving) data is at the 13-F parent level, we begin by following [Appel et al. \(2016, 2019\)](#), [Borochin and Yang \(2017\)](#), [Gutiérrez and Philippon \(2018\)](#) and [Bushee \(2001\)](#) to identify passive 13-F investors (i.e., quasi-indexers, in Bushee's classification).¹⁸ This assignment is at the parent (13-F) level, which aggregates to the parent level all equity holdings across the given parent's

Levenshtein distance function in the fuzzy matching procedure to link organizations to PACs, keeping only matches with at least a 70 percent likeliness score, and subsequently manually check all these fuzzy matches. For the set of organizations that remain unmatched at that stage, we manually search the FEC records for any remaining relevant PACs.

¹³For years prior to the creation of a PAC (i.e., the first year we observe positive PAC giving) we assign zero campaign contributions to the firm or investor.

¹⁴The MIT Election Data are available at <https://electionlab.mit.edu/data>, last accessed June 11, 2025.

¹⁵The Cartesian product $9,639 \times 28,284 \times 19 \times 435$ would be 2.13 trillion observations.

¹⁶We keep investors without a PAC in the sample in order to detect whether politically inactive investors can dissuade portfolio firms from engaging in political giving.

¹⁷An investor-firm pair is included in the Cartesian product even if there are subsequent acquisitions and/or subsequent divestments.

¹⁸Available at <https://accounting-faculty.wharton.upenn.edu/bushee/>, last accessed May 27, 2025.

various funds that have holdings in U.S. public firms (e.g., Vanguard and State Street are both classified as quasi-indexers). In addition to only considering acquisitions by passive 13-F investors, we take a further step to examine whether the newly acquired firm was added simultaneously to a passive mutual fund or ETF that passively tracks an index. To do so, we follow researchers from the mutual fund literature (e.g., [Busse and Tong, 2012](#); [Iliev and Lowry, 2015](#); [Appel et al., 2016, 2019](#)) to link the CRSP Survivor-Bias-Free US Mutual Fund Database to Thomson-Reuters' S12 Mutual Fund Holdings Database. The S12 database offers details on the quarterly holdings of individual mutual funds, while the CRSP database provides information on whether a mutual fund or ETF tracks an index, and specifies which index it tracks. The process of matching holdings data to each of these databases involves considerable data loss, a topic much discussed in the mutual fund literature (see, e.g., [Zhu, 2020](#)). As well, many passive acquisitions in other funds that are reported by the given 13-F investor cannot be recovered using this approach (e.g., funds not covered by CRSP or S12, but still reported in the 13-F holdings). Given the tradeoff between keeping acquisitions by passive 13-F investors that we cannot verify in the second step as being passively acquired via the CRSP / S12 exercise and losing relevant observations, we present results for both the more inclusive *Quasi-indexer* sample based on [Bushee \(2001\)](#) as well as a *Strict Indexer* sample, that includes only acquisitions of firms by quasi-indexer that can be directly linked to an index acquisition by a passive mutual fund or ETF.¹⁹

Some analysis below requires that we identify hedge fund activist investors. For this, we rely on [Brav et al. \(2008, 2015\)](#), who define activists based on the reasons provided for acquisitions in 13-D filings with the SEC, and in particular whether the fund intends to force changes or seek control at target companies.²⁰

For some secondary analysis, we use the BoardEx database to measure institutional investor representation on a portfolio firm's board in each congressional cycle. BoardEx provides a company affiliation for each board member, and often (but not always) includes the organization's CIK number, the ten digit identifier assigned to firms by the SEC. We hand-collect missing CIK numbers by manually searching the names of the other entities that appear in BoardEx on SEC Edgar. Following this step, we link CIK numbers to Thomson-Reuters investor IDs using data generously provided by [Christoffersen et al. \(2015\)](#).²¹

¹⁹The mutual fund literature comes down on both sides of this tradeoff of cleaner identification of index acquisitions versus loss of data. Our more inclusive measure is in the spirit of [Appel et al. \(2016\)](#), who document that when a firm is added to an index, it leads to a significant increase in that firm's holdings among quasi-indexers. Our more restrictive approach follows, for example, [Boller and Morton \(2020\)](#), though they focus exclusively on the S&P 500; as far as we know, broadening this approach to cover all indices covered by CRSP is new to the literature. In robustness checks, we also focus on a subsample that includes only acquisitions related to the S&P 500 index.

²⁰See [Brav et al. \(2008, 2015\)](#) for additional details; we thank Alon Brav for generously sharing the hedge fund activism data with us, which includes events from 1994 to 2016.

²¹Boardex data may be downloaded from <https://wrds-www.wharton.upenn.edu/pages/get-data/>

2.2 Variable definitions

In our baseline analysis, we are interested in assessing changes in the correlation between the PACs of an investor and of a portfolio firm following a large acquisition of shares by the investor in that portfolio firm. $\mathbb{1}(FirmPAC_{f,t,c})$ is an indicator variable which denotes that PAC contributions by firm f to the politician representing congressional district c are strictly positive in congressional cycle t . $\mathbb{1}(InvestorPAC_{i,t,c})$ is similarly defined for investor i . We also create level variables to measure the dollar amount of PAC giving to a politician by a portfolio firm or investor in a given congressional cycle.

We define an indicator variable $\mathbb{1}(Post_{i,f,t})$ which equals 1 for all congressional cycles that follow the acquisition of at least one percent of portfolio firm f by investor i in a single 13-F reporting quarter and as long as investor i retains an ownership stake in firm f , and zero before the acquisition; when the investor fully divests from the portfolio firm, the investor-firm pair exits the sample.²² To offer a clearer sense of how the variable $\mathbb{1}(Post_{i,f,t})$ is constructed, we provide a visualization of it for one specific institutional investor; see Appendix Figures A.1 and A.2, and Appendix A.1 for an accompanying explanation.

2.3 Summary statistics

Of the 9,639 investors in the 13-F data, 6.3 percent have a PAC; 10.4 percent of passive investors have PAC, compared to 4.2 percent of all other investors and 3 percent of activist hedge funds. There are 2,456 portfolio firms that are included in our sample with a PAC and for which we observe a first large acquisition event.

Panel A of Table A.1 reports PAC activity among firms and investors with a PAC, at the congressional cycle level. The average portfolio firm with a PAC in our dataset makes campaign contributions to 39 politicians in a given congressional cycle. The average PAC contribution per politician (including those receiving donations of zero) is 195 dollars. The average giving per politician, conditional on non-zero giving, is 2,165 dollars.²³ The most active firms (e.g., at the

center-research-security-prices-crsp/ with a WRDS subscription.

²²For the divestment analysis in Section 3.2, we apply an analogous definition. $\mathbb{1}(Post_{i,f,t})$ is equal to 1 for all cycles following the complete divestment of a stake of at least one percent in a single 13-F reporting quarter by investor i in firm f and zero for the earlier cycles during which the investor owned a share of at least 1% in the firm; the investor-firm pair enters the sample when the investor first acquires an ownership share larger than 1%. To identify index-driven divestments, we focus on cases in which there are such complete divestments by quasi-indexers that occur in quarters when the firm was removed from an index.

²³In interpreting these statistics, it is important to note that although PAC giving is quantitatively modest, it is seen as a marker of broader political activity. As shown, for example, in [Bertrand et al. \(2020\)](#), PAC giving is only one of many potential forms of political influence activities among corporations, and these activities tend to be positively correlated. For example, in Appendix A.2, we show that there is convergence in lobbying behavior post-acquisition that is analogous to the convergence we document for PAC donations.

90th percentile) reach the Federal Election Commission mandated maximum per politician per election of 5,000 dollars (the limit is 5,600 dollars toward the end of the sample) and contribute to 99 legislators.²⁴

The average institutional investor with a PAC in our dataset makes donations to 35 politicians in a given congressional cycle, with the average per-politician giving of 174 dollars. Conditional on giving to a politician in an congressional cycle, the average contribution is 2,124 dollars. Again, there is wide variation across investors. The 90th percentile investor makes campaign contributions to 90 different politicians. In terms of the distribution of political giving across investor types, there are only modest differences: the average passive investor gives to 31 politicians in an average congressional cycle, compared to 41 for non-passive investors, and 39 for activist hedge funds. The most politically active institutional investor is the Bell Atlantic Asset Management Company that gives to 175 congressional districts in an average congressional cycle.

Panel B reports on the partisanship of PAC giving for both investors and portfolio firms. To obtain party-level PAC giving, we sum across PAC donations to Republicans and divide it by the sum of giving to Democrats and Republicans during a given cycle. In line with previous work (see, e.g., [Bonica, 2016](#)), we find that firms are relatively balanced in their giving on average, with 47.4 percent going to Republicans. Half of the firms in the sample give between 21.1 and 72.2 percent to Republicans; this is less partisan than executives' individual giving as documented by [Bonica \(2016\)](#). Some firms are very partisan, however: the 10th and 90th percentile firms in our dataset give all of their donations to Democrats and Republicans respectively.

Investors, by contrast, show a slight preference for Republicans on average (52.6 percent of giving). Again, there is wide variation: the 10th and 90th percentile of giving to Republicans is 12.5 percent and 94.5 percent, respectively. There is a notable difference between private- and publicly-owned investors. Private investors at the 10th and 90th percentiles contribute 6.3 and 100 percent to Republicans respectively, while the corresponding figures for public investors are 21.7 and 88.3 percent. Hence, there is greater party partisanship among private investors. On the other hand, the extent of partisanship varies little amongst passive, non-passive, and activist funds (not shown). The most Democratic-leaning institutional investors are State Street Corp, BlackRock, ING Investments, and Legg Mason. The most Republican-leaning institutional investors are Deutsche Bank Asset Management, Barclays, Allstate Insurance, Cigna, and Wells Fargo.

²⁴For firms, selection into our sample is based on having a corporate PAC, so it is natural to wonder whether and how the companies we study differ from those without PACs. This comparison has been made in prior research, which finds – unsurprisingly – that larger companies and those in sectors more heavily involved with government (either via contracting or regulation) are more likely to have PACs ([Masters and Keim, 1985](#); [Burris, 1987](#)). In our own data, we find that analogous patterns hold for predicting whether investors have a PAC. e.g., size is a very strong predictor of the existence of a PAC.

Appendix Table A.2 provides some additional details on the frequency and magnitude of acquisition events. The general sample in our main analysis includes 67,541 large acquisition events (as defined above) of which 5,601 are acquisitions by quasi-indexers when a firm is added into an index. The average firm is involved in 5.9 acquisitions per cycle and 14.7% of total stock is owned by new investors (7.3% by new indexers). The average fraction of shares acquired by a given institutional investor during such an event is 2.4%. Firms and investors involved in index inclusion acquisitions are on average larger than those involved in other acquisitions.

3 Ownership Shock and co-movement in political giving

3.1 Panel results

In this section, we explore how the relationship between a firm’s and an investor’s PAC giving changes following a large acquisition of shares (more than 1 percent) by the investor in that firm. In particular, we estimate the following regression, at the investor-firm-congressional district-congressional cycle level:

$$\begin{aligned} \mathbb{1}(\text{Firm PAC}_{f,t,c} > 0) = & \beta_1 \mathbb{1}(\text{Investor PAC}_{i,t,c} > 0) \times \mathbb{1}(\text{Post}_{i,f,t}) + \beta_2 \mathbb{1}(\text{Investor PAC}_{i,t,c} > 0) \\ & + \beta_3 \mathbb{1}(\text{Post}_{i,f,t}) + v_i + \omega_f + \gamma_c + \phi_t + \epsilon_{i,f,c,t} \end{aligned} \quad (1)$$

where $\mathbb{1}(\text{Firm PAC}_{f,t,c} > 0)$ is an indicator variable which denotes that firm f ’s PAC donated to the politician representing congressional district c in congressional cycle t . $\mathbb{1}(\text{Investor PAC}_{i,t,c} > 0)$ is similarly defined for investor i . As we have seen before, because of contribution limits set by the FEC per candidate per election (\$2,000 – \$5,600, depending on the year), the amounts of PAC donations to each individual are modest sums, so we view potential for alignment between investors and firms as stemming primarily from the set of candidates they donate to. The binary nature of the specification focuses on this extensive margin.²⁵

The basic regression specification includes fixed effects for investor i , firm f , congressional district c , and congressional cycle t . $\mathbb{1}(\text{Post}_{i,f,t})$ equals 1 for all congressional cycles after i has acquired a large stake in f , and an investor-firm pair remains in the sample (with $\mathbb{1}(\text{Post}) = 1$) as long as the investor maintains any stake in the firm. The main coefficient of interest is β_1 , the estimated change in the relationship between investor and firm PAC contributions following an

²⁵In a previous version of this paper, [Bertrand et al. \(2023\)](#), we adopted a specification with the logarithm of one plus the PAC contribution. Because, as just discussed, we believe the extensive margin is the most relevant, we adopt here a binary specification, which also makes magnitudes easier to interpret. We also report all main results with a specification analogous to Equation (1) replacing the indicator function with the level of PAC contributions in Appendix Tables A.29 to A.39.

acquisition. Standard errors are double clustered at the firm and investor level.

We present the results in Table 1, with increasingly stringent specifications in terms of included fixed effects. The identifying variation we exploit comes from comparing the correlation of portfolio firm and investor PACs before versus after an acquisition occurs, benchmarked against this correlation for firm-investor pairs for which no such acquisition takes place at the same point in time. Our preferred specification is that of column 4, which includes firm $\times$ investor, firm $\times$ congressional district, firm $\times$ congressional cycle, investor $\times$ congressional district, investor $\times$ congressional cycle, and district $\times$ congressional cycle fixed effects. These fixed effects address a series of plausible concerns. In particular, the firm $\times$ investor fixed effects control for any average correlation in PAC giving in a firm-investor pair; for example, larger investors may acquire larger firms and larger organizations may have more active PACs, a fact documented, for example, in [Bombardini \(2008\)](#). The firm $\times$ district fixed effects address the possibility that some firms give more to certain districts, for example because they operate in those districts, and are acquired by investors that also donate more to those districts; similarly, the investor $\times$ district fixed effects address the possibility that some investors that give more to certain districts may be more likely to make acquisitions in firms that also give to these districts. The firm $\times$ cycle and investor $\times$ cycle fixed effects account for the possibility that changes in PAC giving over time, either at the firm or investor level, may be correlated with investment or acquisition activities; for example, firms that expand during a certain period may donate more and also attract more investment, and investors may donate more during times of fast growth. Including firm $\times$ cycle fixed effects also accounts for changes in scrutiny, benchmarking, and governance that several papers like [Pavlova and Sikorskaya \(2023\)](#), [Brav et al. \(2022\)](#), and [Chang et al. \(2015\)](#) have documented following addition to an index fund and that may, in principle, affect the firm’s political behavior. Finally, district $\times$ cycle fixed effects control for the popularity of certain politicians that, because of their committee assignments or seniority, may attract more donations from both firms’ and investors’ PACs in certain congressional cycles.²⁶ After controlling for these fixed effects, our coefficient of interest β_1 is identified by the increased correlation post vs. pre-acquisition of the PAC giving of firm and investor to a specific congressional district.

In all specifications in Table 1, the point estimate on β_1 is positive (ranging in magnitude between 0.013 and 0.03) and highly significant ($p < 0.001$), indicating that, after a large acquisition, a firm is more likely to contribute to a politician that receives PAC donations from the investor. The magnitude of the increase in the probability of giving to the same politician is between 31 and 54 percent depending on the specification (these are calculated as β_1/β_2).²⁷

²⁶Our results are substantially unchanged if we employ politician fixed effects rather than district fixed effects. We report, as an example, the equivalent of our Table 1 results in Appendix Table A.6.

²⁷In Appendix Table A.7, we obtain results similar to Table 1 when we exclude the largest 4 institutional investors (BlackRock, Vanguard, State Street, and Fidelity) from our analysis; the point estimates are in the range 0.013 –

Under the view that investors influence firm giving (an interpretation that will be further bolstered by material in the next two sections), we provide, through a back-of-the-envelope calculation, a sense of the overall amplification of investor influence via portfolio firms’ political giving. Recall from our main results in Table 1 that the probability of a donation by a company to a given politician is 1.3 percentage points higher post-acquisition if the acquiring investor also donates to that politician. Assuming that influence is comparable across all portfolio firms, and given that the average number of portfolio firms in which an investor holds at least a 1 percent stake is 48, investors’ political giving is amplified by 63 percent relative to own giving.²⁸

Although the focus of the paper is on PAC giving, in Appendix A.2, we show that there is convergence in lobbying behavior post-acquisition that is analogous to the convergence we document for PAC donations.

One concern with our approach thus far is that it focuses on large and discrete purchases for cases in which the investor’s stake is initially zero. While this firm-investor pair “event study” approach has an intuitive appeal, it disregards that a firm may be affected by any institutional investor that owns a share of the firm. In Appendix A.3 we consider an alternative specification in which the contribution by the firm depends on a weighted average of the contributions of all institutional investors with a stake in the firm. The results, both in binary form and in levels, appear in Tables A.9 and A.36. Using this alternative approach, we again observe a strong correlation between firm and investor PAC giving.

In our final set of specifications in this subsection, we examine whether large acquisitions lead to changes in the partisan composition of firm PAC giving. Inference about political ideology from donation profiles is well established in the literature on campaign giving (Bonica, 2016). Specifically, in Table A.10 we look at whether an acquisition by an investor that gives primarily to Republican candidates is associated with a “rightward” shift in a firm’s PAC giving. These analyses are similar in structure to those in the preceding sections; however, the level of observation is at the firm-investor-cycle level, since our measure of political giving is Republican donations as a fraction of total PAC giving (rather than giving to specific districts). Additionally, we limit the sample to politically active investors, to focus on acquirers that plausibly have substantive political preferences or well-defined political agendas. The specification we employ is the following:

0.026, suggesting that our results are not driven by a disproportionate influence from the very largest institutional investors. As a further robustness check, we plot the coefficient on the interaction of $1(Investor\ PAC_{i,t,c} > 0)$ for our preferred specification in column 4 of Table 1, dropping one investor at a time for each of the top 50 institutional investors by assets under management. The estimated coefficient varies in a relatively narrow range, with a single exception (Banker’s Trust NY), when the coefficient increases to 0.016. These results can be found in Appendix Figure A.3.

²⁸This number is obtained as $0.013 \times 48 \times 2,165 / 2,124$, where \$2,165 is the mean firm PAC giving and \$2,124 is the mean investor PAC giving.

$$\begin{aligned} \textit{Fraction to Republicans}_{f,t} = & \beta_1 \textit{Fraction to Republicans}_{i,t} \times \mathbb{1}(\textit{Post}_{i,f,t}) + \beta_2 \mathbb{1}(\textit{Post}_{i,f,t}) \\ & + \beta_3 \textit{Fraction to Republicans}_{i,t} + v_i + \omega_f + \phi_t + \epsilon_{i,f,t}, \end{aligned} \quad (2)$$

where we include firm, congressional cycle, investor and firm $\times$ investor fixed effects. The coefficient of interest, β_1 , takes on a value of 0.0299, which indicates that, relative to the baseline share of 47.4 percent Republican giving, a firm that experiences a large acquisition by an investor that gives only to Republicans sees its Republican share increase by 3 percentage points, equivalent to a 6.3 percent increase. Interestingly, even with the most demanding set of fixed effects in column 5, which control for any time-invariant pair characteristics, the coefficient on *Fraction to Republicans*_{*i,t*} is also highly significant, indicating a partisan alignment between investors and the firms they ultimately own, possibly reflecting, for example, a match based on geography or industry (in addition to a shared ideology). Such alignment increases by 32% after acquisition, once again indicating a substantial amount of convergence post-acquisition.

Our results thus far are consistent with the view that institutional owners influence the political activities of their portfolio firms. However, there are several alternative interpretations that are also consistent with the evidence so far, the plausibility of which we explore in the following section.

3.2 Event study and evidence from index inclusions

One primary alternative interpretation for the increase in the correlation of firm and investor political giving after an acquisition is that institutional investors tend to invest in portfolio firms that share their political preferences. While this concern is partly alleviated by the inclusion of a rich set of fixed effects in Table 1, it is still possible that there are time-varying and pair-specific unobservable factors that may drive both the acquisition and the convergence in donations. We take two overlapping approaches to evaluating this concern: (i) we explore how the relationship between investor and firm PAC giving evolves around the acquisition congressional cycle via an event study research design, and (ii) we focus our analysis on index-based acquisitions.

To implement the event study design, we run a variant of Equation (1) that uses a set of indicator variables to denote the congressional cycle relative to the acquisition date.²⁹ Our specification

²⁹Note that the acquisition quarter could occur any time within the two-year congressional cycle window.

is as follows:

$$\begin{aligned} \mathbb{1}(\text{Firm's } PAC_{f,t,c} > 0) = & \sum_{s=-3}^5 \beta_s \mathbb{1}(\text{Investor's } PAC_{i,t,c} > 0) \times Cycle_{s,i,f,t} + \sum_{s=-3}^5 \gamma_s Cycle_{s,i,f,t} \\ & + \beta_k \mathbb{1}(\text{Investor's } PAC_{i,t,c} > 0) + \Omega_{i,f,c,t} + \epsilon_{i,f,c,t} \end{aligned} \quad (3)$$

where $\mathbb{1}(\text{Firm's } PAC_{f,t,c} > 0)$ and $\mathbb{1}(\text{Investor's } PAC_{i,t,c} > 0)$ are indicator functions which denote that the firm's and investor's PAC contributions to the given politician in district c , respectively, are greater than zero, $Cycle_{s,i,f,t}$ is an indicator function that marks the cycles around the acquisition event and where $s = 1$ marks the first cycle when the investor i has a large ownership stake in firm f (i.e., first cycle when “post” equals one in Table 1). We normalize $\beta_0 = 0$. We include $\Omega_{i,f,c,t}$, which represents the set of fixed effects in column 4 of Table 1.

While an event study allows us to detect pre-trends in the correlation of firm and investor giving, it is still possible that these shared political preferences are time-varying and investors privilege acquisitions into firms they expect will increasingly share their political preferences going forward.

To further rule out these particular interpretations as the sole explanation for our findings, we also replicate our analysis in the *Quasi-Indexer* and *Strict Indexer* sub-samples defined in Section 2. Upon inclusion of a firm in an equity index, many institutional investors re-balance their portfolios toward that firm as they track the index. An inclusion in a stock index thus should act as an exogenous shifter to institutional investor block purchases that is orthogonal to the degree of political convergence over time within a specific investor-firm pair.

For the *Quasi-Indexer* subsample, we restrict the main sample to the list of 698 investors that [Bushee \(2001\)](#) defines as “quasi-indexer” and that we refer to as “passive.” For the *Strict Indexer* subsample, we restrict the *Quasi-Indexer* subsample to index-acquisition events which we define as acquisition events by quasi-indexers for which the two following conditions are simultaneously met: (i) a stock is added to one of the 1,203 indices in our sample of investors’ portfolios and (ii) the same stock is included in the portfolio of a passive investor.^{30,31}

The results of the event study are shown in Figure 1, for both the full sample as well as the two index sub-samples. The point estimates in the event plot include our preferred set of fixed effects in column 4 of Table 1, but the pattern is virtually identical for other specifications.

For all three samples – full, quasi-indexer, and strict indexers (for which the ownership shock can be most readily be interpreted as exogenous) – we see a clear and discrete increase in the interaction term in the post-acquisition periods. None of the samples displays a pre-trend, which

³⁰We use condition (ii) because we cannot link passive investors to a specific index.

³¹We performed a similar exercise restricting the definition to condition (i), and obtain results that are virtually identical to those reported below.

would indicate that acquisitions may be driven by a convergence in political preferences over time.

The sustained increase suggests that the change is persistent, rather than a transitory shift that occurs only at the time of acquisition.³² Further, results of Sammon and Shim (2024) suggest that the block purchases we study generally do not come from other institutional investors, but rather from share sales by the firm itself, “other” investors (smaller institutions and retail investors), and short sellers. Thus, there is not necessarily a decline in catering to another set of institutional investors when these acquisitions occur, so the political catering we document is incremental to the political catering of a firm, rather than the substitution of catering to one set of institutional investors for a different one.³³

In Table 2 we report the analogous results to Table 1 for acquisitions that can more readily be tied to index inclusions. The first four columns provide results for the quasi-indexer subsample, while the second set of columns provide results for the strict indexer subsample. Both sets of results are quite similar to those we observe in the main analysis. For instance, the parameter estimate for β_1 in the restrictive column 4 of Table 1 is 0.0134, while the corresponding estimates in columns 4 and 8 of Table 2 are 0.0118 and 0.0132 respectively.³⁴ Overall, these results speak against a substantial role of endogenous drivers of acquisitions as a source of bias in our baseline estimates.^{35,36}

³²Though our divestment results, which show a post-divestment decline in co-movement, indicate that the identity of the targets of political giving will change as new institutional investors acquire substantial stakes in the portfolio firm.

³³In Section 4.1.2, we show that total PAC giving increases with institutional shareholder ownership, suggesting that political activity is not simply a zero-sum game among the various owners in the firm. Rather, the institutional investors that are our focus appear to have disproportionate influence.

³⁴Point estimates are also near-identical for both the full and index-based samples when we use the continuous version of the dependent variable in Tables A.29 and A.30.

³⁵As we note earlier, firm $\times$ cycle fixed effects absorb any general shifts in the level of giving that arise from entry into an index as a result of changes in investor composition or scrutiny. To the extent that a shift in investor base at index inclusion also leads to an increased concordance between firm PACs and institutional investor PACs, this could impact the interpretation of our estimates. To assess this concern, we estimated an augmented version of our main analysis which includes a term which captures the fraction of shares held by active investors, as well as its interaction with the indicator variable of investor PAC giving. Given that the concerns around this compositional shift are particular to index inclusion, we focus on the strict indexer subsample in this analysis. These findings may be found in Appendix Table A.11. We find that the interaction of investor PAC giving and $\mathbb{1}(Post)$ is similar to what we find when we do not include these additional controls (though somewhat larger). This suggests that the results from our index-acquisition subsample are unlikely to be distorted by the changes in investor composition that come with index inclusion. Table A.12 further augments this exercise by including the three-way interaction of $\mathbb{1}(Investor\ PAC_{i,t,c} > 0) \times \mathbb{1}(Post_{i,f,t}) \times Active$, which is negative and highly significant, indicating that there is relatively *less* of an increase in co-movement after an index-based acquisition if active share is relatively large. This makes intuitive sense given that the sample is comprised of index-based acquisitions, as firms with a relatively high share of active investors need to cater to the political preferences of that investor base, leaving fewer resources to cater to the political preferences of new index-driven acquirers.

³⁶We also provide an even stricter version of the analysis in Equation (A.2), in which we define ownership based *solely* on acquisitions by passive investors around index entries. Prior to index entry, by definition these ownership values are zero, so this variant captures the spirit of our event study approach, while also having the benefit of avoiding concerns around endogeneity of acquisition targets. These results, presented in Appendix Tables A.13 and

Table 3 focuses on divestments rather than acquisitions, as we anticipate a symmetric (negative) effect from these ownership changes. The sample in this case includes investor-firm pairs in which the investor held its stake of at least 1 percent for at least one congressional cycle (the pre-period), and then the investor divested its holding in the given firm in a single quarter, and hence within a single cycle (the post-period). We document the opposite patterns from those observed in Table 1. The point estimates on the interaction of post-divestment and $\mathbb{1}(\text{Investor PAC} > 0)$ are negative in all cases and vary between -0.0772 and -0.0665 , which indicates that the positive association between firm and investor PAC giving declines following a divestment. We observe a very similar pattern for divestments driven by index exclusions in Appendix Table A.15.

The preceding results indicate a robust increase in co-movement of firm-investor political giving following an acquisition that is robust to the more exogenous subsample of index-based acquisition events. In Appendix A.4 we show that these results are most plausibly driven by investors influencing firms, rather than vice-versa, using changes in shifts in investors’ political giving around acquisition events, as compared to shifts in firms’ political giving. While we include these details only in the appendix, the intuition behind this suite of tests is straightforward: If firms are responding to investors’ preferences, we should observe a (relatively large) shift in the composition of their political donations, while the composition of investors’ donations should be relatively unchanged. If investors are responding to firms’ preferences, we should observe the opposite pattern. We find that investor political giving changes less around acquisition events than firm giving, suggesting that it is firms that are responding to investors’ preferences.

Before turning to a discussion of mechanisms, we note that our staggered difference-in-differences estimates are subject to the critiques of, e.g., [Goodman-Bacon \(2021\)](#); [Callaway and Sant’Anna \(2021\)](#); [Sun and Abraham \(2021\)](#). We include a discussion of these concerns as well as a set of analyses which assess the extent to which our analyses may be corrupted by the “bad comparisons” problem that may emerge in two-way fixed effects models with staggered treatment timing. Since our primary conclusion is that our results are largely unaffected by the concerns raised by this literature, we confine this material to Appendix A.5.

4 Mechanisms: Motivations for and channels of influence

In this section, we explore the mechanisms, broadly defined, that may account for our main results. We distinguish between two types of mechanisms. First, we wish to understand the possible *motivations* firm management may have in aligning their political giving with that of their investors. Second, we provide a qualitative discussion as well as some empirical evidence on

A.37, also indicate a significant correlation ($p < 0.001$) between investor PAC giving and firm PAC giving, though the point estimates are smaller than those based on the full sample.

the *channels* through which influence may take place. We conclude this section by taking stock of what our analyses suggest about the welfare consequences of investor influence over political giving.

4.1 Firms’ and investors’ motivations for shifting political activity

The evidence we have presented thus far points to the influence of institutional investors on the political giving of portfolio firms. Our aim in this section is to better understand why investors engage in this influence activity and why firms’ managers may be receptive to their efforts. We organize our findings as follows. First, we present evidence that, on the portfolio firm side, convergence with investor political giving is much stronger at times when managers plausibly are under threat due to contentious proposals raised in shareholder meetings or other crises, consistent with a manager-catering interpretation of our main results. We then explore whether the reasons behind investors’ influence efforts are more likely driven by profit motives or personal political preferences. We present several pieces of evidence that collectively suggest an important role for personal preferences: (a) in heterogeneity analyses, we show our results are driven by investors with more partisan giving; (b) firm giving becomes less relevant for business strategy as institutional investors’ holdings increase, as captured by shifts away from politicians that serve on committees that oversee areas that are important for the firm’s business; and (c) portfolio firm PAC giving is strongly correlated with institutional investors’ individual management and employee giving. In light of these results, we believe the documented behavior constitutes a form of agency costs, whereby political influence is a benefit for the institutional investor’s owners and managers that comes at the cost of distortion in the political activity for portfolio firms and their ultimate owners.

4.1.1 Firms’ motivations: contentious proposals, crises, and catering

In describing the increased role of large index funds over corporate decision-making, [Coates \(2023\)](#) observes that institutional investor support is crucial for any contentious shareholder vote, as “the collective vote of indexed investors will almost always include the median vote in [contested proxy fights.]” He goes on to suggest that managers will therefore actively court the favor of such investors, and that there is not necessarily any need for investors to exert influence directly since, “[r]ational managers anticipate goals and preferences of index fund providers, and then enact them, to some extent, without the need for explicit, public directives or exercises of power.” To the extent that there is active engagement by investors with management, as we will discuss in Section 4.2, it rarely comes via public interactions.

Motivated by these observations – the pressure on managers to cater to investors’ interests particularly when contentious proposals are included in shareholder meetings; and the lack of

any publicly observable influence-seeking actions by investors – we provide indirect evidence that convergence in political giving may result from managerial catering by exploring how our main results vary depending on whether managers face immediate shareholder pressures.

First, directly inspired by Coates (2023), we look at variation in investor influence based on whether there are votes on (potentially contentious) shareholder or management proposals in a given congressional cycle period. To generate the necessary variables for these analyses, we obtain all shareholder and management proposals between 2003 and 2018 in the Institutional Shareholder Services’ (ISS) “Voting Analytics Company Vote Results” dataset, which covers shareholder meetings for Russell 3000 companies. These data include information on the outcome of each vote (fraction voting yes, no, and abstain) and the topic. We define shareholder proposals as those that are sponsored by shareholders and management proposals as those that are sponsored by management. Both management and investor proposals tend to focus on governance-related topics (e.g., executive compensation and board governance) though shareholder proposals also do include more socially-oriented topics. The sample size for the analyses based on these data is considerably smaller given that the ISS dataset only covers Russell 3000 companies and only starts in 2003.

As our broadest measure of pressure on management to cater to investors, we construct an indicator variable, $\mathbb{1}(Any\ Shrholder)$, which captures whether there was at least one shareholder proposal in a given two-year congressional-cycle period.³⁷ We then augment our main specification from Equation (1) with the third-order term $\mathbb{1}(Investor\ PAC > 0) \times \mathbb{1}(Post) \times \mathbb{1}(Any\ Shrholder)$ (along with appropriate lower-order terms). The coefficient on this term captures the extent to which the increased co-movement in investor and firm PAC giving is higher at times when management may be particularly motivated to cater to investor preferences. We generate several further measures that focus on *contentious* proposals from shareholders or management, which capture situations in which management will be particularly keen to have investor support. Following Brochet et al. (2021), we define shareholder proposals as contentious if a particular type of proposal had historically received at least 45% of the vote (i.e., close to the 50% threshold for passage); the threshold for management proposals is 20%, since even modest opposition may put pressure on management to make changes. We define $\mathbb{1}(Contentious\ Shrholder)$ and $\mathbb{1}(Contentious\ Mgmt)$ as indicator variables denoting whether there was a contentious shareholder or management pro-

³⁷To provide a sense of the more common proposal types, Appendix Table A.4 lists the top 10 most frequent topics for all shareholder proposals and also for the subset that are classified as contentious. Particularly for contentious proposals, these focus on governance-related topics (especially board governance), though common shareholder proposals also do include socially-oriented topics (e.g., lobbying disclosure) as well as environmental impact (e.g., greenhouse gas emissions, though this did not quite make the top 10 list, with 198 proposals, and climate change with 199 proposals). Management proposals tend to focus on governance-related concerns, such as pay or board appointments.

posal in a given congressional cycle, respectively.³⁸ As a further measure of managements’ need to elicit shareholder support, we consider congressional cycles with at least one special meeting following the definition of Li et al. (2022), who argue that these meetings reflect urgent and non-routine governance issues facing the firm.

Our final measure builds on the insight that shareholder support may even help to preempt a proxy vote. For this, we use a broader indication of managers’ insecurity: whether the firm had at least one controversial ESG incident during an congressional cycle. We use data collected by RepRisk, a firm that provides “ESG and business-conduct risk research,” with data available 2008 onward. We follow RepRisk’s classification to define an ESG crisis as a highly severe, highly visible, and novel incident. The specification is otherwise identical to that of our proxy vote analysis, except that we replace the indicator variable with $\mathbb{1}(ESG)$, which reflects the presence of a major ESG incident during the congressional cycle.³⁹

The results of these heterogeneity analyses appear in Table 4. We focus on our preferred specification from Table 1, column 4. In the first column, the point estimates imply that in congressional cycles when there is at least one shareholder proposal, the extent of post-acquisition co-movement is nearly four times higher (0.00603 versus $0.00603 + 0.0172$). The implied differential impact is somewhat higher for congressional cycles in which there are contentious shareholder or management proposals (columns 2 and 3) or either (column 4). The results for special meetings (column 5) suggest no differential effect, while those in column 6 imply a much stronger post-acquisition co-movement in congressional cycles in which there is an ESG crisis.⁴⁰

Overall, we take this set of findings as suggestive evidence of managerial catering as a primary explanation for firms’ responsiveness to investor political preferences.

4.1.2 Investors’ motivations: strategic relevance, investor attributes, and personal versus business motivations

We posit that investors have two primary potential motivations for exerting influence over the political activities of firms: personal political objectives and strategic business objectives. We take

³⁸Brochet et al. (2021) also define director appointments as contentious if at least a third of management’s recommendations are opposed by Glass Lewis or ISS; we do not include this measure because we did not have access to historical recommendations from these proxy voting services.

³⁹We limit these analyses to firms with at least one major ESG incident (46 percent of our initial sample of firms) from 2008 onward, so again the sample size is much smaller relative to our main results.

⁴⁰We also present these results measuring PAC contributions in levels rather than via indicator variables, and also for our two index sub-samples. These results appear in Appendix Tables A.29-A.39. The levels specification in Table A.32 and the quasi-indexer subsample in Table A.23 yield virtually identical results to those in Table 4. For the more restrictive set of index-based acquisitions, the point estimates are all directionally consistent with our main results, but only 3 of 7 coefficients are significant. We note, however, that in this much-reduced sample, the main effect, $\mathbb{1}(\text{Investor PAC} > 0) \times \mathbb{1}(\text{Post})$, is itself not statistically significant in a specification that does not include any third-order term.

several approaches to providing evidence on the extent that either or both of these motivations more plausibly accounts for our main results.

Institutional ownership and the strategic relevance of political giving

We have so far illustrated how the political behavior of portfolio firms aligns with the preferences of institutional investors, especially at times when the firm’s management is facing contentious situations that would make the investor’s support more valuable. Here, we examine the compositional changes in the roster of politicians supported by portfolio firms that are induced by an acquisition. We specifically distinguish politicians based on their strategic relevance to a firm, which will help us make a sharper distinction between personal and strategic motivations of institutional investors.

We begin by investigating whether total firm PAC giving increases with the overall degree of institutional ownership. Our main results on the influence of institutional investors on political giving need not imply such an expansion. For example, firm stakeholders may compete for political resources in what is effectively a zero-sum game, in which case the post-acquisition shift in giving would reflect a reallocation rather than expansion of political activity. Alternatively, if firms continue their core profit-motivated political giving irrespective of ownership, the addition of new institutional investors may lead to an expansion of political giving, as firm resources are devoted to these new owners’ interests.

In the first three columns of Table 5, we present the relationship between institutional ownership (the fraction of a firm’s stock owned by an institutional investor) and overall PAC giving at the firm-cycle level, including fixed effects for firm and cycle (column 1), industry and cycle (column 2), and industry $\times$ cycle (column 3). By including total institutional investor ownership and not just shares held by indexers, we are considering broad changes in the ownership structure of the firm at the expense of cleaner identification. Thus, the fixed effects we introduce attempt to control for characteristics that may make a firm more likely to be the target of institutional investors and also affect the firm’s political giving. While firm fixed effects control for such time-invariant firm characteristics, when we introduce interactions with time fixed effects, we are forced to zoom out to the industry as the variation of interest is at the firm-cycle level. Industry $\times$ cycle fixed effects account for broad trends in both political giving and institutional investor ownership within a NAICS 6-digit industry. The point estimate is relatively small and statistically insignificant in the first column, which relies on within-firm variation over time; when we use a less restrictive set of controls – either industry and congressional cycle or industry $\times$ cycle – the correlation is positive and significant at the 5 percent level.

We next examine the *composition* of firm political donations as a function of institution ownership, to explore whether resources devoted to investors’ political interests draw contributions away from those that are of more direct strategic importance to the firm. To do so, we con-

sider how institutional ownership affects giving to politicians on committees that oversee issues frequently lobbied by a firm, a well-established measure of politicians’ importance to firms (see, e.g., [Stewart III and Groseclose, 1999](#); [Bertrand et al., 2020](#)). Intuitively, if institutional investors are diverting resources away from a firm’s core political strategy, it should result in a (relative) decline in giving to politicians on strategically important committees for these firms.

We identify the politicians who are strategically important to a firm as those sitting on congressional committees that oversee issues that the firm actively lobbying on across years in the lobbying reports that are available from the Senate Office of Public Records. These lobbying reports contain information on the specific issues (e.g., Trade, Energy, Budget, etc.) about which the firm is petitioning the government. Following [Bertrand et al. \(2020\)](#), we apply a crosswalk between the firm’s lobbying issues and the relevant congressional committees covering those issues. The members of Congress sitting on those committees form the set of strategically important politicians for that firm.⁴¹

In columns 4-6 we show the relationship between overall institutional ownership and giving to strategically important politicians, using specifications that parallel those of the first three columns.⁴² In all specifications, we observe a decline in giving to politicians that are of strategic interest to the firm. We take these results as suggestive evidence that institutional investors’ motivations are not to force firm management to align political activities with business strategy, but rather to induce managers to expend political resources on investors’ personal agendas. In the final set of columns 7-9, we use the fraction of giving to relevant politicians as the dependent variable, which yields similar results. The point estimates imply a one-to-one negative correspondence between the fraction of a firm held by institutional investors and the fraction of giving that goes to business-relevant politicians.

Heterogeneity across investor types

In this subsection we employ heterogeneity analysis to further shed light on investors’ motivations, and whether the convergence in investor-firm PAC giving is driven by an institutional investor’s efforts to change a portfolio firm’s business strategy, or simply reflect investors’ partisan tastes.

Active versus passive investors We begin by examining whether the effect we estimate is different for passive versus active investors. Following [Appel et al. \(2016, 2019\)](#), we classify in-

⁴¹Membership of each congressional committee is available through [Stewart III and Groseclose \(1999\)](#) and subsequent updates of the original data.

⁴²Note that, since this relevance measure is available only for firms that lobby at least once during the period we study – 32 percent of our sample overall – the sample is far smaller in these analyses, relative to those on overall giving. If we limit our sample in columns 1-3 to these firms, there is no statistically significant relationship between institutional ownership and total giving.

vestors as passive if they are categorized by [Bushee \(2001\)](#) as Quasi-Indexers and classify investors as active if they are categorized as Transients. We present a variant on Equation (A.2), in which we split the PAC contributions of investors by active and passive investors (see Equation (A.3) in Appendix A.6). The results, reported in Appendix Tables A.25 and A.38, show that the increase in alignment between firm and investor PAC giving is more pronounced for passive investors. One may attribute this result to the well-documented fact (e.g., [Bushee, 2001](#), [Appel et al., 2016](#)) that the holding periods of passive owners are longer on average, and therefore there might be stronger incentives for the firm to align their giving with passive investors, a point we will return to shortly.

Private vs publicly-owned investors We next consider a split of investors based on whether they are privately or publicly owned. The latter includes institutional investors such as BlackRock, State Street, and Invesco, while the former are funds such as Vanguard and Fidelity. Since fund managers at private investment firms tend to face less outside scrutiny, their political giving may be more likely to reflect the preferences of their owners and managers. Indeed, as we documented in Section 2.3, private funds do tend to have more partisan giving profiles.

Columns 1 and 2 in Table 6 provide the results of specification (1) for private versus public investors respectively, using the saturated specification that includes the set of fixed effect from our preferred specification in Table 1, column 4.⁴³ While the coefficient of interest on the interaction of investor PAC giving and $1(Post)$ is significant at the 1 percent level for both sub-samples, the point estimate is more than two times larger for private firms.

Partisanship A third approach to capturing heterogeneity in personal investor preferences versus business strategy concerns is the extent of partisanship in an investor’s political donations. In columns 3 and 4 of Table 6, we distinguish among *types* of politically active investors, based on whether they tend to give primarily to one party, versus a mix of Republican and Democratic giving.⁴⁴ The intuition for this sample split is that investors and firms motivated purely by financial gain will be more apt to give to politicians from both parties, strategically targeting, for example, key members of relevant committees, or those involved in crafting potentially important legislation. To implement this split, we define partisanship as $|D/(D + R) - 0.5|$, where D and R are overall PAC donations to Democrats and Republicans respectively in a given congressional cycle. We then take the mean for each investor over all cycles for which it had a PAC during our sample period and classify investors as “More Partisan” if this value is above the sample mean

⁴³The comparisons we report here are unaffected by the choice of specification. In Appendix Table A.26 we further break down the results by investor type. We find that Investment Advisors and Investment Companies (e.g., State Street and Fidelity), together with Bank Trusts (e.g., JPMorgan Chase and Bank of America), drive the results we have uncovered thus far.

⁴⁴The fact that institutional investors vary widely in their political orientation echoes the findings in [Bolton et al. \(2020\)](#), where ideology is inferred through investors’ proxy votes.

over all investors.⁴⁵ The coefficient on the interaction of interest is twice as large for *More Partisan* investors (0.020) compared to *Less Partisan* investors (0.010). The magnitude of this difference appears even larger when we consider that the average of the dependent variable is 0.0121 for column 3 and 0.0181 for column 4.⁴⁶

Hedge fund investors Finally, as documented by Brav et al. (2008, 2015) among others, hedge fund investors with an activist intension can exert particularly strong pressure on portfolio companies. If our main results reflect firm PAC giving adjusting to investor preferences, these shifts should be particularly pronounced for hedge fund acquisitions with an activism intention. We use the hedge fund activism data from Brav et al. (2008, 2015) to identify hedge funds within our sample of 13-F investors that have an activist intention when acquiring a stake in a given firm.⁴⁷ Hedge funds and other 13-F investors that own more than 5% of a given firm are required to disclose whether they have an activist intention regarding the firm in which they have acquired a large stake. This regulatory filing serves as the primary source for identifying the activist intentions of hedge funds.

The hedge fund results in column 5 of of Table 6 indicate that for this subset of investors, there is a much larger effect of acquisitions on investor-firm PAC co-movement. The coefficient on $\mathbb{1}(Investor\ PAC_{i,t,c} > 0) \times \mathbb{1}(Post_{i,f,t})$ is approximately four times that of the analogous coefficient in our main results in Table 1.

Collectively, the results in these last two subsections, but especially those in columns 4-9 of Table 5 and those in columns 1-4 of Table 6 provide suggestive evidence of ideological rather than business strategic considerations behind our main findings. We further corroborate this evidence below.

Employee versus PAC giving

In this final subsection on investor motivation, we compare the post-acquisition convergence in investor and firm PAC giving to that of individual political giving of *managers and employees* of the institutional investor and the acquired firm’s PAC. While the interpretation of these results is complicated by the fact that both PAC and individual giving may reflect strategic concerns (see, e.g., Richter and Werner, 2017), we argue that individual donations are plausibly more a reflection of investing managers’ personal preferences rather than an investor’s strategic interests via a PAC. Thus, if we observe a large increase in co-movement between investor employee giving and firm

⁴⁵The number of observations is larger in column 4 because Less Partisan investors are involved in significantly more acquisitions.

⁴⁶In Appendix Table A.27 we report these results for index inclusion acquisitions only.

⁴⁷We thank Alon Brav for generously sharing this data with us.

PAC giving after an acquisition controlling for investor PAC giving, we will take it as reflecting, at least in part, more personal preferences.

We collect investor employee individual political giving from the Federal Election Commission. While a firm’s corporate PAC is a segregated fund that collects contributions and in turn contributes to candidates in the name of the firm, individual contributions are made by each person under their name. Individuals, though, are asked to report their employer when donating to candidates, so we link the reported employer name to our list of institutional investors (see Appendix A.7 for details on the matching procedure). We provide an overview of these data in Appendix Table A.3. Notably, a sizable fraction of donors (23-31%, depending on the sample) are executive or management employees (defined as including the keywords “Founder”, “Chairman”, “President”, “General Partner”, “Founding Partner”, “Managing Partner”, “Chief”, “CEO”, “CFO”, and other related terms in their occupation title in the FEC data). While the number of donors per firm is relatively low, it is important to keep in mind that we do not include donors to presidential campaigns, senators, or non-incumbents, and that to appear in our data, total donations must exceed the \$200 above which reporting is required to the FEC.⁴⁸ In Table 7, we augment our specifications from Table 1 with terms for both the direct effect of employee giving (i.e., $\mathbb{1}(Indiv. \text{ Giving} > 0)$) as well as its interaction with $\mathbb{1}(Post)$. Even conditional on PAC giving (and its interaction with $\mathbb{1}(Post)$), we observe a highly significant increase in co-movement of firm PAC giving with investor employee giving after an acquisition takes place. As one way of comparing the relative magnitudes of the effects of investor PAC versus investor individual employee political giving, we give at the bottom of the table the ratio of the post-acquisition change in co-movement (the coefficient on the interaction term) to the baseline effect (the coefficient on the direct effect of giving). This ratio is higher for employee giving across all specifications, and is more than three times greater in our preferred specification in column 4.⁴⁹ We take these results as further suggestive evidence that the personal political preferences of the individuals that manage the funds may play an important role in explaining our main results, whether it is portfolio firms’ managers catering to those preferences or investors otherwise imposing those preferences onto the firms they control.

⁴⁸We also do not have information on the number of employees for each fund. However, we can offer a rough comparison based on the larger funds, for which employment data are readily available. To take one example, in congressional cycle 2018, BlackRock had 60 out of 14,400 employees (https://www.sec.gov/Archives/edgar/data/1364742/000156459018003744/blk-10k_20171231.htm and https://www.sec.gov/Archives/edgar/data/1364742/000156459019005479/blk-10k_20181231.htm) whose donations appeared in FEC records, a share of 0.42%; for all Americans, 0.21% donated to *any* campaign at a level that required FEC disclosure.

⁴⁹We present results on investor employee giving for our quasi-indexer and strict indexer sub-samples in Appendix Table A.28. For index samples, we again find that co-movement of investor employee giving and firm PAC giving increases significantly after an acquisition.

4.2 Potential channels of influence: the role of the board

We now turn to exploring *how* investors might go about influencing firm political giving. This is a challenging task, since as Coates (2023) describes (and as we discuss earlier) some influence is implicit – firm management can infer investor preferences from their statements or actions. On occasion, investors’ positions are very public and explicit, as in opposition to political donations to election deniers following the January 6 storming of the Capitol.⁵⁰ In such instances, there is likely positive publicity from these statements, and so they are made in a public manner. It is, however, entirely possible that there are efforts at political suasion that take place out of public view for which the objective is less likely to be well received by the public. There are ample opportunities for investors to convey their preferences, implicitly or explicitly, via “engagements,” which are described by Coates (2018) as not-infrequent “meetings” between fund staff and representatives of portfolio companies, “sometimes in person, more often by phone, sometimes just by email.” As far as we know, it is impossible to quantify the frequency or content of these engagements, but it is possible that in communicating investors’ preferences on various management and corporate issues, the topic of political activity may arise. In the absence of direct evidence on the content of such conversations, we employ an observable measure that, we argue, offers a readier channel of communication between an institutional investor and its portfolio companies: board representation. Given the prominent role of board members in firm governance, there is similarly a greater need for management to cater to board members’ preferences, relating this set of results back to our findings in Section 4.1.1.

In approximately five percent of the acquisitions in our sample, an investor obtains a seat on the portfolio company’s board. Since board membership provides a direct channel for an investor to influence corporate decision-making (Calluzzo and Kedia, 2019), we conjecture that investor-firm similarity will further increase after an investor obtains board representation. We use an indicator variable that denotes whether investor i has a seat on portfolio firm f ’s board, and run specifications which parallel those presented in Table 1, augmented with the third-order interaction of $\mathbb{1}(\text{Investor PAC} > 0)$, $\mathbb{1}(\text{Post})$, and an indicator variable denoting that an investor obtained a board seat following the acquisition ($\mathbb{1}(\text{Board})$). These results appear in Table 8.⁵¹ Across all specifications, we see higher investor-firm PAC co-movement when an acquisition comes with a board seat.

⁵⁰See, e.g., “What Fortune 500 Companies Said After Jan. 6 vs. What They Did,” *ProPublica*, November 1, 2022, for BlackRock’s policy.

⁵¹Note that the second-order interaction of $\mathbb{1}(\text{Investor PAC} > 0)$ and $\mathbb{1}(\text{Board})$ is redundant since board seats are only obtained after an investor acquires a sizable stake. The direct term $\mathbb{1}(\text{Board})$ also drops out in specifications that include investor $\times$ firm fixed effects, since it is an acquisition-specific attribute. We do not allow it to vary over time since its interpretation would then be further complicated by the increasingly strong impact of investor preferences over time, as shown in Figure 1.

4.3 Welfare implications of investor influence

We conclude this section by taking stock of the implications of the preceding results for welfare. While our welfare assessments are necessarily speculative, our findings collectively point away from portfolio firm profit maximization and toward a type of agency costs in the relationship between ultimate beneficial owners and institutional investors.

First, Table 5 shows that firms' PAC donations increase with institutional ownership and this increase appears to be directed to politicians who are not on congressional committees relevant to a firm's business. This change in giving is not merely additive, as some firm PAC donations are deflected away from committees relevant to a firm's business (and thus towards irrelevant ones).

Second, in Table 7, we show that investor personal giving correlates more strongly with portfolio firm PAC giving than investor PAC giving. If one interprets – as seems plausible – individual donations by executives and employees of an institutional investor as more sensitive to partisan preferences than the investor's corporate PAC (which may be more scrutinized for profit maximization), it strengthens the case for potential governance distortions and welfare losses.

Third, the co-movement in investor-firm PAC giving is strongest when there are votes on shareholder proposals at the portfolio firm. In these circumstances, firm management (which also controls the firm's PAC giving) needs the support of large investors, and our findings suggest that firm management appears to cater to investors' political objectives especially at these difficult times. A firm's profit-maximizing political strategy could certainly change around shareholder proposals. But it is unclear that it should do so systematically in a way that pleases the investor, and when the investor's support is needed by the firm's management.

Fourth, the heterogeneity analyses in Table 6 show that our results are primarily driven by ideologically partisan investors. It is precisely these investors with strong political views that should be more willing to distort firm's decisions.

Finally, turning to earlier material from Section 3.2, we show a drop in co-movement after divestment. This shows that investor-driven donations seem ephemeral, and it is harder to see how these political choices would be valuable or central to the firm's objectives if they are abandoned when the investor exits.

While no individual result provides decisive evidence on the welfare consequences of institutional investor influence on its own, collectively our findings are most readily reconciled with investor political preferences driving our main findings rather than profit maximization in the interest of shareholders, many of whom are the investors' own economic principals.

This of course raises the issue of why this newly documented type of agency costs persists and shareholders do not punish institutional investors that engage in this behavior. We believe the answer relies in the difficulty of clearly observing this behavior. The pervasive opacity in corporate

political spending has drawn significant scholarly attention. Researchers, notably Lucian Bebchuk at Harvard Law, have long argued for enhanced disclosure (e.g., [Bebchuk and Jackson Jr., 2012](#); [Bebchuk and Jackson, 2013](#)). [Bombardini and Trebbi \(2025\)](#) further emphasize the opacity of corporate political influence, proposing disclosure reforms. This obscurity stems from the complex and often hard to trace nature of political tools like charitable contributions, “dark money” channels (501(c)(4)s), grassroots campaigns, and so forth. This issue remains a critical frontier in the Political Economy and Corporate Finance literature.

5 Conclusion

The shift toward institutional ownership of public companies is one of the most prominent financial trends in recent history. We investigate the implications of this shift for the political influence-seeking activities of U.S. corporations, a topic with relevance both for the governance role of institutional investors in general, and also for our understanding of the amplification of influence in the U.S. political system.

We present evidence of an increased similarity in political giving between a publicly traded firm and an institutional investor after the investor completes a large block purchase of the firm’s stock. Our approach sidesteps selection concerns by making use of acquisitions due to inclusions of firms in stock indices, since for investors holding index funds, such acquisitions are orthogonal to political alignment of the ensuing block purchase. The particularly large increase in co-movement in political giving in times of contentious shareholder meetings suggests that portfolio firms’ managers’ catering to the political preferences of investors is a relevant mechanism. Finally, the fact that the increase in co-movement is larger for private and politically more partisan investors, and also manifest itself when using the personal political contributions of the individuals that manage the funds rather than the investor PAC speak to the amplification of the personal political preferences of investment managers.

Overall, the evidence indicates that institutional investors exert influence over the behavior of portfolio firms, which is pertinent, for example, to the ongoing debate over the consequences of common ownership, and raises concerns over the influence of a small collection of investment managers in the political realm. The latter is of relevance to the political economy and finance literature as (i) this phenomenon may result in a misuse of corporate resources, a typical concern in the corporate finance literature on governance and political behavior of firms; (ii) it is also a potentially illegal activity as “[r]eimbursement for a contribution or otherwise contributing in the name of another person can result in substantial civil penalties and jail time”;⁵² and most

⁵² “52 U.S.C. §§ 30122 and 30109” according to the FEC, available <https://www.fec.gov/updates/contributions-in-the-name-of-another-are-strictly-prohibited/>, last accessed June 11, 2025.

importantly (iii) it is an obvious channel through which a limited groups of voters may gain outsized political influence.

Our findings contribute to the legal and policy debate over the nature of corporate political activity. Whereas the Supreme Court took shareholder profit maximization as firms’ objective in expressing their political “voice”, our results suggest that controlling interests – whether senior managers or institutional investors – also determine how businesses wield their political influence. The shareholder maximization perspective of corporate political voice might thus be viewed as aspirational rather than factual. Indeed, it is captured as the very first principle laid out in the Center for Political Accountability’s (CPA) Model Code of Conduct for Corporate Political Spending, which states that “*Political spending shall reflect the company’s interests, as an entity, and not those of its individual officers, directors, and agents.*”⁵³

Finally, our results underscore the general concerns raised by Coates (2018) – that the rise of institutional ownership may give too much control to a concentrated number of individuals, and especially in politics. These findings may therefore give greater urgency to solutions proposed by Coates and others – for example by promoting stewardship codes such as the CPA’s Model Code, devolving voting rights to those invested in a fund, or simply disclosing potential conflicts. Coates (2023) further observes that similar concerns may be raised by the rise of private equity funds which may similarly exert control – politically and otherwise – over the assets they own. While it is beyond the scope of this paper to study amplification of political influence by private equity investors, Coates’ writing indicates the potential for our results to speak to a broader economic problem.

⁵³See <https://corpgov.law.harvard.edu/wp-content/uploads/2020/11/CPA-Wharton-Zicklin-model-code-of-conduct-for-corporate-political-spending-10-13-20-.pdf>, last accessed June 11, 2025.

References

- Aghion, P., J. Van Reenen, and L. Zingales (2013). Innovation and institutional ownership. *The American Economic Review* 103(1), 277–304.
- Anton, M., F. Ederer, M. Gine, and M. Schmalz (2022). Common ownership, competition, and top management incentives. *Journal of Political Economy*.
- Appel, I. R., T. A. Gormley, and D. B. Keim (2016). Passive investors, not passive owners. *Journal of Financial Economics* 121(1), 111–141.
- Appel, I. R., T. A. Gormley, and D. B. Keim (2019). Standing on the shoulders of giants: The effect of passive investors on activism. *The Review of Financial Studies* 32(7), 2720–2774.
- Autor, D., D. Dorn, G. H. Hanson, G. Pisano, and P. Shu (2020). Foreign competition and domestic innovation: Evidence from us patents. *American Economic Review: Insights* 2(3), 357–374.
- Azar, J. and X. Vives (2021). General equilibrium oligopoly and ownership structure. *Econometrica* 89(3), 999–1048.
- Backus, M., C. Conlon, and M. Sinkinson (2019). The common ownership hypothesis: Theory and evidence. *Brookings papers*.
- Bebchuk, L. and R. J. Jackson (2013, 04). Shining light on corporate political spending. *Georgetown Law Journal* 101, 923–967.
- Bebchuk, L. A., A. Cohen, and S. Hirst (2017). The agency problems of institutional investors. *Journal of Economic Perspectives* 31(3), 89–102.
- Bebchuk, L. A. and S. Hirst (2019). The specter of the giant three. Technical report, National Bureau of Economic Research.
- Bebchuk, L. A. and R. J. Jackson Jr. (2012). Shining light on corporate political spending. *Georgetown Law Journal* 101, 923.
- Berle, A. and G. Means (1932). Private property and the modern corporation.
- Bertrand, M., M. Bombardini, R. Fisman, B. Hackinen, and F. Trebbi (2021). Hall of mirrors: Corporate philanthropy and strategic advocacy. *The Quarterly Journal of Economics* 136(4), 2413–2465.

- Bertrand, M., M. Bombardini, R. Fisman, and F. Trebbi (2020). Tax-exempt lobbying: Corporate philanthropy as a tool for political influence. *The American Economic Review* 110(7), 2065–2102.
- Bertrand, M., M. Bombardini, R. Fisman, F. Trebbi, and E. Yegen (2023). Investing in influence: Investors, portfolio firms, and political giving. Technical report, National Bureau of Economic Research.
- Bertrand, M., M. Bombardini, and F. Trebbi (2014). Is it whom you know or what you know? an empirical assessment of the lobbying process. *The American Economic Review* 104(12), 3885–3920.
- Boller, L. and F. S. Morton (2020). Testing the theory of common stock ownership. Technical report, National Bureau of Economic Research.
- Bolton, P., T. Li, E. Ravina, and H. Rosenthal (2020). Investor ideology. *Journal of Financial Economics* 137(2), 320–352.
- Bombardini, M. (2008). Firm heterogeneity and lobby participation. *Journal of International Economics* 75(2), 329–348.
- Bombardini, M. and F. Trebbi (2011). Votes or money? theory and evidence from the us congress. *Journal of Public Economics* 95(7), 587–611.
- Bombardini, M. and F. Trebbi (2012). Competition and political organization: Together or alone in lobbying for trade policy? *Journal of International Economics* 87(1), 18–26.
- Bombardini, M. and F. Trebbi (2020). Empirical models of lobbying. *Annual Review of Economics* 12(1).
- Bombardini, M. and F. Trebbi (2025). The political power of firms. In D. Acemoglu and J. A. Robinson (Eds.), *Handbook of Political Economy*. North Holland. Forthcoming.
- Bonica, A. (2016). Avenues of influence: On the political expenditures of corporations and their directors and executives. *Business and Politics* 18(4), 367–394.
- Borochin, P. and J. Yang (2017). The effects of institutional investor objectives on firm valuation and governance. *Journal of Financial Economics* 126(1), 171–199.
- Brav, A., W. Jiang, and H. Kim (2015). The real effects of hedge fund activism: Productivity, asset allocation, and labor outcomes. *The Review of Financial Studies* 28(10), 2723–2769.

- Brav, A., W. Jiang, S. Ma, and X. Tian (2018). How does hedge fund activism reshape corporate innovation? *Journal of Financial Economics* 130(2), 237–264.
- Brav, A., W. Jiang, F. Partnoy, and R. Thomas (2008). Hedge fund activism, corporate governance, and firm performance. *The Journal of Finance* 63(4), 1729–1775.
- Brav, A., N. Malenko, and A. Malenko (2022). Corporate governance implications of the growth in indexing. Technical report, National Bureau of Economic Research.
- Brochet, F., F. Ferri, and G. S. Miller (2021). Investors’ perceptions of activism via voting: Evidence from contentious shareholder meetings. *Contemporary Accounting Research* 38(4), 2758–2794.
- Burris, V. (1987). The political partisanship of american business: A study of corporate political action committees. *American Sociological Review*, 732–744.
- Bushee, B. J. (2001). Do institutional investors prefer near-term earnings over long-run value? *Contemporary Accounting Research* 18(2), 207–246.
- Busse, J. and Q. Tong (2012). Mutual fund industry selection and persistence. *The Review of Asset Pricing Studies* 2(2), 245–274.
- Callaway, B. and P. H. Sant’Anna (2021). Difference-in-differences with multiple time periods. *Journal of Econometrics* 225(2), 200–230.
- Calluzzo, P. and S. Kedia (2019). Mutual fund board connections and proxy voting. *Journal of Financial Economics* 134(3), 669–688.
- Chang, Y.-C., H. Hong, and I. Liskovich (2015). Regression discontinuity and the price effects of stock market indexing. *The Review of Financial Studies* 28(1), 212–246.
- Christoffersen, S. K., E. Danesh, and D. K. Musto (2015). Why do institutions delay reporting their shareholdings? evidence from form 13f. *Wharton Business School Working Paper*.
- Coates, J. (2018). The future of corporate governance part i: the problem of twelve.
- Coates, J. (2023). *The problem of twelve: When a few financial institutions control everything*. New York: Columbia Global Reports.
- Colonnelli, E., V. P. Neto, and E. Teso (2022). Politics at work. Technical report, National Bureau of Economic Research.

- Corum, A. A., A. Malenko, and N. Malenko (2021). Corporate governance in the presence of active and passive delegated investment. *European Corporate Governance Institute–Finance Working Paper 695*, 2020.
- de Figueiredo, J. M. and B. K. Richter (2014). Advancing the empirical research on lobbying. *Annual Review of Political Science* 17, 163–185.
- Drutman, L. (2015). *The business of America is lobbying: How corporations became politicized and politics became more corporate*. Oxford University Press.
- Dyck, A., K. V. Lins, L. Roth, and H. F. Wagner (2019). Do institutional investors drive corporate social responsibility? international evidence. *Journal of Financial Economics* 131(3), 693–714.
- Fos, V., E. Kempf, and M. Tsoutsoura (2022). The political polarization of corporate america. Technical report, National Bureau of Economic Research.
- Fowler, A., H. Garro, and J. L. Spenkuch (2020). Quid pro quo? corporate returns to campaign contributions. *The Journal of Politics* 82(3), 000–000.
- Gabaix, X., P. Gopikrishnan, V. Plerou, and H. E. Stanley (2006). Institutional investors and stock market volatility. *The Quarterly Journal of Economics* 121(2), 461–504.
- Gompers, P. A. and A. Metrick (2001). Institutional investors and equity prices. *The Quarterly Journal of Economics* 116(1), 229–259.
- Goodman-Bacon, A. (2021). Difference-in-differences with variation in treatment timing. *Journal of Econometrics* 225(2), 254–277.
- Gutiérrez, G. and T. Philippon (2018). Ownership, concentration, and investment. *AEA Papers and Proceedings* 108, 432–437.
- Heath, D., D. Macciocchi, R. Michaely, and M. Ringgenberg (2022). Do index funds monitor? *The Review of Financial Studies* 35(1), 91–131.
- Iliev, P. and M. Lowry (2015). Are mutual funds active voters. *The Review of Financial Studies* 28(2), 446–485.
- Jensen, M. C. and W. H. Meckling (1976). Theory of the firm: Managerial behavior, agency costs and ownership structure. *Journal of Financial Economics* 3(4), 305–360.
- Kang, K. (2016). Policy influence and private returns from lobbying in the energy sector. *Review of Economic Studies* 83(1), 269–305.

- Kempf, E., M. Luo, L. Schäfer, and M. Tsoutsoura (2023). Political ideology and international capital allocation. *Journal of Financial Economics* 148(2), 150–173.
- Kerr, W. R., W. F. Lincoln, and P. Mishra (2014). The dynamics of firm lobbying. *American Economic Journal: Economic Policy* 6(4), 343–379.
- Lewellen, J. and K. Lewellen (2022). Institutional investors and corporate governance: The incentive to be engaged. *The Journal of Finance* 77(1), 213–264.
- Li, S. Z., E. Maug, and M. Schwartz-Ziv (2022). When shareholders disagree: Trading after shareholder meetings. *The Review of Financial Studies* 35(4), 1813–1867.
- López, A. L. and X. Vives (2019). Overlapping ownership, r&d spillovers, and antitrust policy. *Journal of Political Economy* 127(5), 2394–2437.
- Masters, M. F. and G. D. Keim (1985). Determinants of pac participation among large corporations. *The Journal of Politics* 47(4), 1158–1173.
- McCahery, J. A., Z. Sautner, and L. T. Starks (2016). Behind the scenes: The corporate governance preferences of institutional investors. *The Journal of Finance* 71(6), 2905–2932.
- Pavlova, A. and T. Sikorskaya (2023). Benchmarking intensity. *The Review of Financial Studies* 36(3), 859–903.
- Posner, E. A., F. M. Scott Morton, and E. G. Weyl (2017). A proposal to limit the anti-competitive power of institutional investors. *Antitrust Law Journal*.
- Richter, B. K. and T. Werner (2017). Campaign contributions from corporate executives in lieu of political action committees. *The Journal of Law, Economics, and Organization* 33(3), 443–474.
- Rios-Avila, F., B. Callaway, and P. H. Sant’Anna (2021). csdid: Difference-in-differences with multiple time periods in stata. In *Stata Conference*, pp. 47.
- Sammon, M. and J. J. Shim (2024). Who clears the market when passive investors trade.
- Sant’Anna, P. H. and J. Zhao (2020). Doubly robust difference-in-differences estimators. *Journal of Econometrics* 219(1), 101–122.
- Schmalz, M. C. (2018). Common-ownership concentration and corporate conduct. *Annual Review of Financial Economics* 10, 413–448.
- Snyder Jr, J. M. (1990). Campaign contributions as investments: The us house of representatives, 1980-1986. *Journal of Political Economy* 98(6), 1195–1227.

- Stewart III, C. and T. Groseclose (1999). The value of committee seats in the united states senate, 1947-91. *American Journal of Political Science*, 963–973.
- Stratmann, T. (2005). Some talk: Money in politics. a (partial) review of the literature. *Public Choice* 124, 135–156.
- Sun, L. and S. Abraham (2021). Estimating dynamic treatment effects in event studies with heterogeneous treatment effects. *Journal of Econometrics* 225(2), 175–199.
- Tahoun, A., L. van Lent, and M. Zhu (2023). Biased executives. *London Business School Working Paper*.
- Teso, E. (2022). Influence-seeking in us corporate elites’ campaign contribution behavior. *The Review of Economics and Statistics*, 1–34.
- Thieme, S. (2020). Moderation or strategy? political giving by corporations and trade groups. *The Journal of Politics* 82(3), 1171–1175.
- Tripathi, M., S. Ansolabehere, and J. M. Snyder (2002). Are pac contributions and lobbying linked? new evidence from the 1995 lobby disclosure act. *Business and Politics* 4(2), 131–155.
- Walker, E. T. and C. M. Rea (2014). The political mobilization of firms and industries. *Annual Review of Sociology* 40, 281–304.
- Yegen, E. (2019). Common-ownership and portfolio rebalancing. *Rotman School of Management Working Paper*.
- Yegen, E. (2020). Do institutional investors mitigate social costs of privatization? evidence from prisons. *Rotman School of Management Working Paper*.
- Zhu, Q. (2020). The missing new funds. *Management Science* 66(3), 1193–1204.

Figure 1: Firm and investor PAC giving: Event study

This figure shows how the association between firm and investor PAC giving changes during congressional cycles around the acquisition. Specifically, it plots the estimated coefficients β_s in regression Equation (3): $\mathbb{1}(Firm's\ PAC_{f,t,c} > 0) = \sum_{s=-3}^5 \beta_s \mathbb{1}(Investor's\ PAC_{i,t,c} > 0) \times Cycle_{-s_{i,f,t}} + \beta_k \mathbb{1}(Investor's\ PAC_{i,t,c} > 0) + \sum_{s=-3}^5 \gamma_s Cycle_{-s_{i,f,t}} + \Omega_{i,f,c,t} + \epsilon_{i,f,c,t}$ where $\mathbb{1}(Firm's\ PAC_{f,t,c} > 0)$ and $\mathbb{1}(Investor's\ PAC_{i,t,c} > 0)$ are indicator functions which denote that the firm's and investor's PAC contributions, respectively, are greater than zero, $Cycle_{-s_{i,f,t}}$ is an indicator function that marks the cycle around the acquisition event where cycle one is when the investor i already has a large stake in firm f (i.e., first cycle when “post” equals one in Table 1), and $\Omega_{i,f,c,t}$ is the set of fixed effects in column 4 of Table 1 (firm $\times$ investor, firm $\times$ congressional cycle, firm $\times$ congressional district, investor $\times$ congressional cycle, investor $\times$ congressional district, and congressional district $\times$ congressional cycle fixed effects). The same exercise is done using the *Strict Indexer* and *Quasi-Indexer* samples as defined in the notes of Table 2. We normalize $\beta_0 = 0$. Standard errors are double clustered at the firm and investor levels, and 95% confidence intervals are plotted. level.

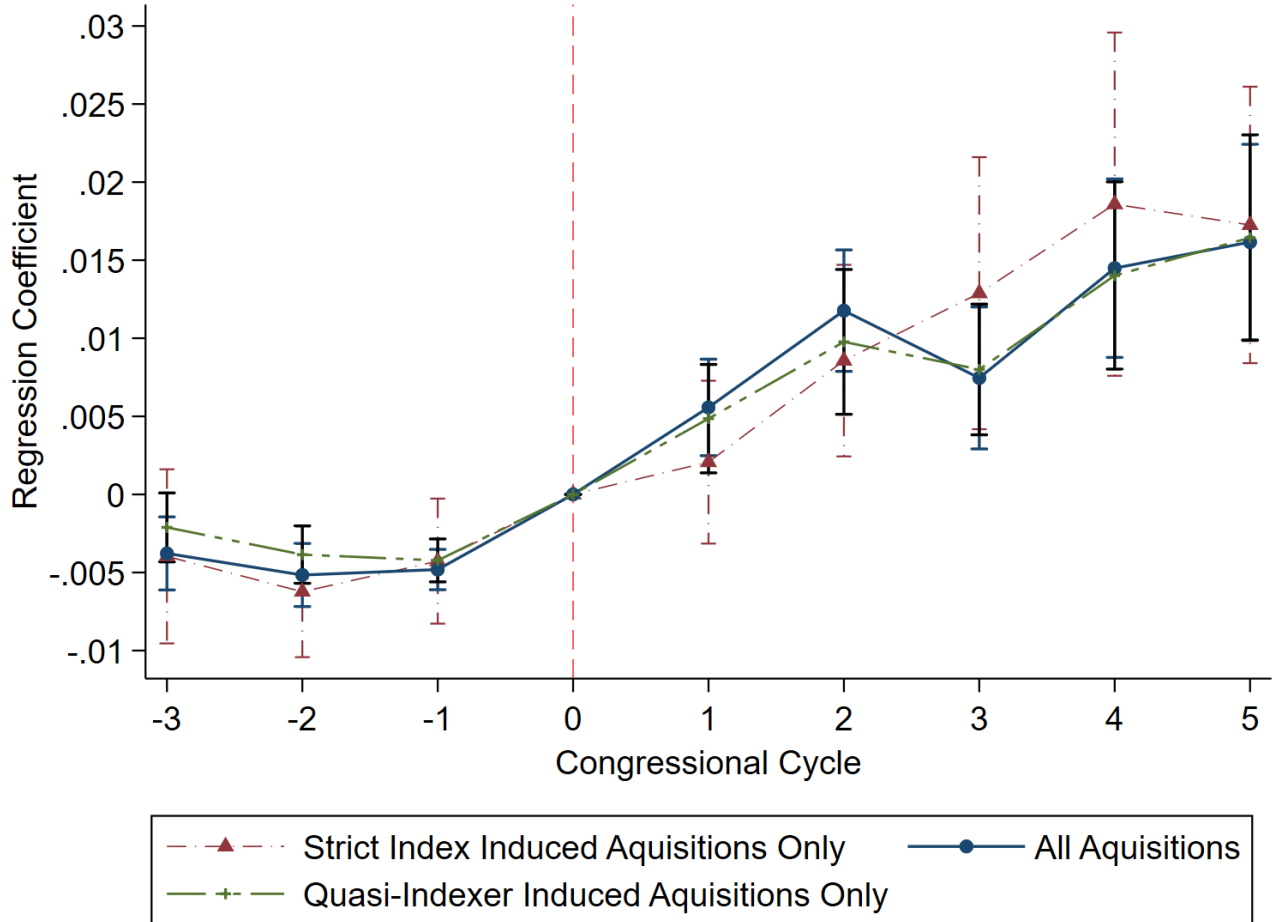


Table 1: Firms' and investors' PAC giving

This table presents the association between the PAC contributions by firms and their investors' PAC contributions at the congressional cycle–district level during the cycles around a large stock acquisition. The data are, therefore, at the investor–firm–congressional cycle–district level. $\mathbb{1}(\text{Post})$ denotes observations that occur after the acquisition has occurred. The dependent variable is an indicator variable which denotes that PAC contributions by a firm are greater than zero; $\mathbb{1}(\text{Investor's PAC} > 0)$ is similarly defined. The mean of the dependent variable is 0.011. Standard errors (in parenthesis) are double clustered at the firm and investor levels.

Dep. Var.: $\mathbb{1}(\text{Firm's PAC} > 0)$	(1)	(2)	(3)	(4)
$\mathbb{1}(\text{Investor's PAC} > 0) \times \mathbb{1}(\text{Post})$	0.0293*** (0.00655)	0.0301*** (0.00667)	0.0164*** (0.00345)	0.0134*** (0.00305)
$\mathbb{1}(\text{Investor's PAC} > 0)$	0.0549*** (0.00471)	0.0551*** (0.00475)	0.0437*** (0.00367)	0.0427*** (0.00354)
$\mathbb{1}(\text{Post})$	-0.0003* (0.000202)	-0.0004** (0.000216)	-8.44e-05 (0.000156)	-0.0001*** (5.84e-05)
Fixed Effects				
Firm	X		X	
Investor	X		X	
Congressional Cycle	X	X		
Congressional District	X	X		
Firm $\times$ Investor		X		X
Firm $\times$ Congressional District				X
Firm $\times$ Congressional Cycle				X
Investor $\times$ Congressional District				X
Investor $\times$ Congressional Cycle				X
Congressional Cycle $\times$ District			X	X
N	339,785,165	339,785,165	339,785,165	339,764,091
R^2	0.024	0.025	0.038	0.135

Notes: *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

Table 2: Firms' and passive investors' PAC contributions – Index inclusion sample

This table presents the association between the PAC contributions by firms and their index investors' PAC contributions at the congressional cycle–district level during the cycles around a large stock acquisition. The data are, therefore, at the investor–firm–congressional cycle–district level. Columns 1 to 4 use the Quasi-Indexer Sample: acquisitions by quasi-indexers as defined by Bushee (2001), and columns 5 to 8 cover the Strict-Indexer sample: acquisitions by quasi-indexers in firms that were added into an index during the same reporting period as the acquisition period by the given quasi-indexer. $\mathbb{1}(\text{Post})$ denotes observations that occur after the acquisition has occurred. The dependent variable is an indicator variable which denotes that PAC contributions by a firm are greater than zero; $\mathbb{1}(\text{Inv's PAC} > 0)$ is similarly defined. The mean of the dependent variable is 0.0115. Standard errors (in parenthesis) are double clustered at the firm and investor levels.

Dep. Var.: $\mathbb{1}(\text{Firm's PAC} > 0)$								
	Quasi-Indexer Sample				Strict Indexer Sample			
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
$\mathbb{1}(\text{Inv's PAC} > 0) \times \mathbb{1}(\text{Post})$	0.0305*** (0.00772)	0.0313*** (0.00781)	0.0146*** (0.00377)	0.0118*** (0.00335)	0.0407*** (0.00577)	0.0413*** (0.00573)	0.0162*** (0.00350)	0.0132*** (0.00308)
$\mathbb{1}(\text{Inv's PAC} > 0)$	0.0548*** (0.00542)	0.0548*** (0.00546)	0.0420*** (0.00399)	0.0412*** (0.00386)	0.0470*** (0.00463)	0.0469*** (0.00463)	0.0326*** (0.00325)	0.0325*** (0.00300)
$\mathbb{1}(\text{Post})$	-.0006*** (0.000260)	-.0008*** (0.000273)	-.0003* (0.000190)	-.0002*** (8.92e-05)	-.0009* (0.000558)	-.001* (0.000583)	-.00047 (0.000536)	-.0002*** (7.80e-05)
Fixed Effects								
Firm	X		X		X		X	
Investor	X		X		X		X	
Congressional Cycle	X	X			X	X		
Congressional District	X	X			X	X		
Firm $\times$ Investor		X		X		X		X
Firm $\times$ Congressional District				X				X
Firm $\times$ Congressional Cycle				X				X
Investor $\times$ Congressional District				X				X
Investor $\times$ Congressional Cycle				X				X
Congressional Cycle $\times$ District			X	X			X	X
N	168,155,771	168,155,771	168,155,771	168,138,702	38,356,758	38,356,758	38,356,758	38,355,867
R^2	0.029	0.029	0.044	0.142	0.028	0.028	0.047	0.126

Notes: *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

Table 3: Firms' and investors' PAC contributions – Divestments

This table presents the association between the PAC contributions by firms and their investors' PAC contributions at the congressional cycle–district level during the cycles around a large stock divestments. The data are, therefore, at the investor–firm–congressional cycle–district level. $\mathbb{1}(\text{Post})$ denotes observations that occur after the divestment has occurred, and take the value of zero for the observations that occur during the periods in which the investor has an ownership stake in the given firm. The dependent variable is an indicator variable which denotes that PAC contributions to a given incumbent by a firm are greater than zero; $\mathbb{1}(\text{Investor's PAC} > 0)$ is similarly defined. The mean of the outcome variable is 0.015. Standard errors (in parenthesis) are double clustered at the firm and investor levels.

Depend. Var.: $\mathbb{1}(\text{Firm's PAC} > 0)$	(1)	(2)	(3)	(4)
$\mathbb{1}(\text{Investor's PAC} > 0) \times \mathbb{1}(\text{Post})$	-0.0758*** (0.0194)	-0.0772*** (0.0198)	-0.0743*** (0.0180)	-0.0665*** (0.0175)
$\mathbb{1}(\text{Investor's PAC} > 0)$	0.220*** (0.0207)	0.221*** (0.0210)	0.199*** (0.0193)	0.190*** (0.0195)
$\mathbb{1}(\text{Post})$	0.00283*** (0.000775)	0.00314*** (0.000879)	0.00277*** (0.000746)	0.00208** (0.000902)
Fixed Effects				
Firm	X		X	
Investor	X		X	
Congressional Cycle	X	X		
Congressional District	X	X		
Firm $\times$ Investor		X		X
Firm $\times$ Congressional District				X
Firm $\times$ Congressional Cycle				X
Investor $\times$ Congressional District				X
Investor $\times$ Congressional Cycle				X
Congressional Cycle $\times$ District			X	X
N	104,258,141	104,258,141	104,258,141	104,225,090
R^2	0.055	0.056	0.069	0.189

Notes: *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

Table 4: Firms' and investors' PAC contributions – Shareholder proposals and ESG incidents

This table presents the association between the PAC contributions by firms and their investors' PAC contributions at the congressional cycle–district level during the cycles around a large stock acquisition and major events. $\mathbb{1}(\text{Post})$ denotes observations that occur after the acquisition has occurred. The dependent variable is an indicator variable which denotes that PAC contributions by a firm are greater than zero; $\mathbb{1}(\text{Investor's PAC} > 0)$ is similarly defined. $\mathbb{1}(\text{Event})$ takes the value of one in column (1) if the firm received at least one shareholder proposal during the given cycle, in column (2) if it received during a given cycle a shareholder proposal on a topic that received previously at least 45% support from shareholders, in column (3) if the firm during a given cycle has a management proposal on a topic that historically received at least 20% opposition from shareholders, and in column (4) if it has received either a contentious shareholder or a contentious management proposal during the given cycle. Furthermore, $\mathbb{1}(\text{Event})$ takes the value of one in column (5) if it has a non-annual meeting during the given cycle, and in column (6) if the firm experiences a major ESG crisis during the specific cycle, zero otherwise. Standard errors are double clustered at the firm and investor level.

Depend. Var.: $\mathbb{1}(\text{PAC}_F > 0)$	(1)	(2)	(3)	(4)	(5)	(6)
	Event = Any Shrholder. Proposal	Event = Contentious Shrholder.	Event = Contentious Mgmt.	Event = Cont. Shrholder. + Mgmt.	Event = Special Meeting	Event = Major ESG Crisis
$\mathbb{1}(\text{PAC}_I > 0) \times \mathbb{1}(\text{Post}) \times \mathbb{1}(\text{Event})$	0.0172*** (0.00478)	0.0391*** (0.00996)	0.0202*** (0.00379)	0.0225*** (0.00423)	0.00120 (0.00566)	0.0181** (0.00719)
$\mathbb{1}(\text{PAC}_I > 0) \times \mathbb{1}(\text{Post})$	0.00603** (0.00242)	0.0106*** (0.00301)	0.00255 (0.00286)	0.000433 (0.00314)	0.0139*** (0.00334)	0.00159 (0.00193)
$\mathbb{1}(\text{Post}) \times \mathbb{1}(\text{Event})$	-0.0004*** (0.000130)	-0.0008*** (0.000321)	-0.0002*** (9.03e-05)	-0.0003*** (0.000105)	-3.50e-05 (0.000105)	-0.0002** (0.000118)
$\mathbb{1}(\text{PAC}_I > 0) \times \mathbb{1}(\text{Event})$	0.0165*** (0.00338)	0.0108*** (0.00395)	0.00146 (0.00284)	0.00263 (0.00253)	-0.00180 (0.00287)	0.0210*** (0.00612)
$\mathbb{1}(\text{PAC}_I > 0)$	0.0329*** (0.00270)	0.0379*** (0.00299)	0.0375*** (0.00346)	0.0369*** (0.00342)	0.0390*** (0.00302)	0.0412*** (0.00259)
$\mathbb{1}(\text{Post})$	4.44e-05 (4.18e-05)	-6.38e-05** (2.80e-05)	7.00e-05 (5.06e-05)	0.000110* (5.92e-05)	-0.0001*** (3.33e-05)	6.09e-05* (3.37e-05)
$\mathbb{1}(\text{Event})$	- -	- -	- -	- -	- -	- -
Fixed Effects						
Firm $\times$ Investor	X	X	X	X	X	X
Firm $\times$ Congressional District	X	X	X	X	X	X
Firm $\times$ Congressional Cycle	X	X	X	X	X	X
Investor $\times$ Congressional District	X	X	X	X	X	X
Investor $\times$ Congressional Cycle	X	X	X	X	X	X
Congressional Cycle $\times$ District	X	X	X	X	X	X
N	41,958,893	41,958,893	41,958,893	41,958,893	41,958,893	41,599,866
R^2	0.271	0.271	0.270	0.270	0.270	0.300

Notes: *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

Table 5: Total institutional ownership and political giving by firms

This table presents the association between the PAC contributions by firms and total institutional ownership. Therefore, the data is at the firm and cycle level. The outcome variable of columns 1 to 3 measures whether the firm makes any PAC giving during the given cycle to any politician, and in columns 4 to 6 is the total PAC giving by a firm in logs to politicians who sit on relevant committees as defined in the paper. The outcome variable in columns 7 to 9 is defined as the ratio of relevant committee giving by firms over total firm giving. The variable, *Total Inst. Ownership*, is the average total institutional ownership of a firm during a given political congressional cycle. The mean of the outcome variable in columns 1 to 3 is 0.77, in columns 4 to 6 it is 8.015, and in columns 7 to 9 is 0.418. Standard errors (in parenthesis) are clustered at the firm level given that the data is at the firm and cycle level.

	Overall Giving			Relevant Giving			Relevant Giving Ratio		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
<i>Total Inst. Own.</i>	0.089 (0.0658)	0.729*** (0.0814)	0.827*** (0.0983)	-0.980* (0.553)	-1.043** (0.476)	-1.198* (0.723)	-0.914* (0.518)	-0.640* (0.354)	-1.066** (0.462)
Fixed Effects									
Firm	X			X			X		
Cycle	X	X		X	X		X	X	
Industry		X			X			X	
Industry $\times$ Cycle			X			X			X
<i>N</i>	15,688	13,866	12,141	2,577	2,417	1,462	2,495	2,339	1,398
<i>R</i> ²	0.526	0.109	0.228	0.581	0.318	0.434	0.320	0.185	0.370

Notes: *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

Table 6: Firms' and investors' PAC contributions – Investor Types

This table presents the association between the PAC contributions by firms and their investors' PAC contributions at the congressional cycle–district level during the cycles around a large stock acquisition using a variety of ownership breakdowns. The data are, therefore, at the investor–firm–congressional cycle–district level. Columns 1 and 2 break down the sample by funds that are privately owned versus publicly owned, respectively. Columns 3 and 4 split active investors by above versus below median skew where skew is defined as the absolute value of Republican giving share minus 0.5. Column 5 contains only firms and hedge fund investor pairs where the acquisition takes place around the given hedge fund investor's activism event targeting the acquired firm using data provided by Alon Brav. $\mathbb{1}(\text{Post})$ denotes observations that occur after the acquisition has occurred. The dependent variable is an indicator variable which denotes that PAC contributions by a firm are greater than zero; $\mathbb{1}(\text{Investor's PAC} > 0)$ is similarly defined. The mean of the dependent variable of columns 1, 2, 3, 4, and 5 are 0.0097, 0.0138, 0.0121, 0.0181, and 0.0091 respectively. Standard errors (in parenthesis) are double clustered at the firm and investor level.

Depend. Var.: $\mathbb{1}(\text{Firm's PAC} > 0)$					
	(1) <i>Private Funds</i>	(2) <i>Public Funds</i>	(3) <i>More Partisan</i>	(4) <i>Less Partisan</i>	(5) <i>Hedge Fund Activism</i>
$\mathbb{1}(\text{Investor's PAC} > 0) \times \mathbb{1}(\text{Post})$	0.021*** (0.00286)	0.008*** (0.00326)	0.020*** (0.00452)	0.010*** (0.00177)	0.0465*** (0.00145)
$\mathbb{1}(\text{Investor's PAC} > 0)$	0.039*** (0.00278)	0.040*** (0.00377)	0.038*** (0.00251)	0.036*** (0.00283)	0.0149*** (0.000690)
$\mathbb{1}(\text{Post})$	-0.0001*** (3.12e-05)	-0.0003** (0.000184)	-0.001*** (0.000361)	-0.001*** (0.000321)	- -
Fixed Effects					
Firm $\times$ Investor	X	X	X	X	X
Firm $\times$ Congressional District	X	X	X	X	X
Firm $\times$ Congressional Cycle	X	X	X	X	X
Investor $\times$ Congressional District	X	X	X	X	X
Investor $\times$ Congressional Cycle	X	X	X	X	X
Congressional Cycle $\times$ District	X	X	X	X	X
<i>N</i>	267,366,099	72,387,795	8,848,871	28,695,878	947,226
<i>R</i> ²	0.129	0.152	0.198	0.176	0.120

Notes: *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

Table 7: Firms' PAC giving and institutional investors' employee giving

This table presents the association between the PAC contributions by firms and their investors' employee contributions at the congressional cycle–district level during the cycles around a large stock acquisition, starting from 1990. The data are, therefore, at the investor–firm–congressional cycle–district level. $\mathbb{1}(\text{Post})$ denotes observations that occur after the acquisition has occurred. The dependent variable is an indicator variable which denotes that PAC contributions by a firm are greater than zero; $\mathbb{1}(\text{Investor's PAC} > 0)$ is similarly defined; $\mathbb{1}(\text{Ind. Giving} > 0)$ is an indicator variable which denotes that the individual political contributions by the investor's employees are greater than zero. The mean of the dependent variable is 0.0117. Standard errors (in parenthesis) are double clustered at the firm and investor level.

Depend. Var.: $\mathbb{1}(\text{Firm's PAC} > 0)$				
	(1)	(2)	(3)	(4)
$\mathbb{1}(\text{Investor's PAC} > 0) \times \mathbb{1}(\text{Post})$	0.0294*** (0.00639)	0.0303*** (0.00651)	0.0161*** (0.00311)	0.0131*** (0.00273)
$\mathbb{1}(\text{Investor's PAC} > 0)$	0.0536*** (0.00408)	0.0537*** (0.00412)	0.0427*** (0.00313)	0.0417*** (0.00288)
$\mathbb{1}(\text{Ind. Giving} > 0) \times \mathbb{1}(\text{Post})$	0.00132 (0.00115)	0.00175 (0.00122)	0.00097** (0.000470)	0.000637* (0.000353)
$\mathbb{1}(\text{Ind. Giving} > 0)$	0.00322*** (0.000614)	0.00306*** (0.000609)	0.000983*** (0.000362)	0.000629** (0.000263)
$\mathbb{1}(\text{Post})$	-0.0003** (0.000174)	-0.0005** (0.000196)	-0.0001 (0.000144)	-0.0002*** (5.02e-05)
Fixed Effects				
Firm	X		X	
Investor	X		X	
Congressional District	X	X		
Congressional Cycle	X	X		
Firm $\times$ Investor		X		X
Firm $\times$ Congressional District				X
Firm $\times$ Congressional Cycle				X
Investor $\times$ Congressional District				X
Investor $\times$ Congressional Cycle				X
Congressional Cycle $\times$ District			X	X
N	227,592,651	227,592,651	227,592,651	227,549,396
R^2	0.027	0.028	0.041	0.161
β_1/β_2 (Investor PAC Giving)	0.549	0.564	0.377	0.314
β_3/β_4 (Investor Employee Giving)	0.410	0.572	0.982	1.013

Notes: *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

Table 8: Firms' and investors' PAC contributions – Board of directors connection

This table presents the association between the PAC contributions by firms and their investors' PAC contributions at the congressional cycle–district level during cycles around an establishment of a board of directors connection. The data are, therefore, at the investor–firm–congressional cycle–district level. $\mathbb{1}(\text{Board})$ denotes observations that occur after the board connection is established (an employee working for the given institutional investor has a seat on the board). The dependent variable is an indicator variable which denotes that PAC contributions by a firm are greater than zero; $\mathbb{1}(\text{Investor's PAC} > 0)$ is similarly defined. Standard errors (in parentheses) are double clustered at the firm and investor level.

Depend. Var.: $\mathbb{1}(\text{Firm's PAC} > 0)$	(1)	(2)	(3)	(4)
$\mathbb{1}(\text{Investor's PAC} > 0) \times \mathbb{1}(\text{Post}) \times \mathbb{1}(\text{Board})$	0.0353*** (0.00984)	0.0387*** (0.0104)	0.0411*** (0.00913)	0.0319*** (0.00836)
$\mathbb{1}(\text{Investor's PAC} > 0) \times \mathbb{1}(\text{Post})$	0.0280*** (0.00657)	0.0287*** (0.00669)	0.0148*** (0.00347)	0.0123*** (0.00305)
$\mathbb{1}(\text{Investor's PAC} > 0)$	0.0550*** (0.00471)	0.0551*** (0.00475)	0.0438*** (0.00367)	0.0428*** (0.00354)
$\mathbb{1}(\text{Board})$	-0.000556* (0.000289)	-	-0.000619** (0.000304)	-
$\mathbb{1}(\text{Post})$	-0.000342* (0.000203)	-0.000443** (0.000217)	-8.63e-05 (0.000156)	-0.000197*** (5.89e-05)
Fixed Effects				
Firm	X		X	
Investor	X		X	
Congressional District	X	X		
Congressional Cycle	X	X		
Firm $\times$ Investor		X		X
Firm $\times$ Congressional District				X
Firm $\times$ Congressional Cycle				X
Investor $\times$ Congressional District				X
Investor $\times$ Congressional Cycle				X
Congressional Cycle $\times$ District			X	X
<i>N</i>	339,785,165	339,785,165	339,785,165	339,764,091
<i>R</i> ²	0.024	0.025	0.038	0.135

Notes: *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

Online Appendix to
“Investing in Influence: Investors, portfolio firms,
and political giving”

Marianne Bertrand, Matilde Bombardini, Raymond
Fisman, Francesco Trebbi and Eyub Yegen

- Not for Publication -

A Online Appendix

A.1 Data visualization

To illustrate the definition of our event variable and the structure of our data, we provide a visualization of the variable *Post* for acquisitions (Figure A.1) and divestments (Figure A.2), for a single institutional investor. We use the Capital Group and all firms that appear in its portfolio at any point during the sample. We selected this specific investor because it had sufficient acquisitions so as to provide a clear sense of how the dataset is constructed, but not so many as, e.g., BlackRock, as to create an impossibly large image. The images are created using the `panelview` command in Stata. Each line is a firm with years on the horizontal axis. For the acquisition sample, the color is a darker shade when $Post = 1$, a lighter shade when $Post = 0$, and uncolored when the observation is missing, because the investor completely divested from that firm. We reiterate that inclusion in the sample requires that the investor had a zero stake, which was increased to an ownership stake of at least one percent, in a single quarter. The transition from $Post = 0$ to $Post = 1$ occurs in the congressional cycle when this stake is purchased. For the divestment sample, the line is shaded darker after a divestment has occurred ($Post = 1$), lighter before ($Post = 0$), and uncolored when the observation is missing (because the investor had not yet invested in that firm). To be included in the divestment sample, the investor must hold at least a one percent ownership share of the firm, and divest it completely, in a single quarter. The transition from $Post = 0$ to $Post = 1$ occurs when this divestment takes place.

A.2 Additional shifts in political activity: Lobbying

Firms have multiple ways of exerting political influence. In fact, lobbying expenditures are an order of magnitude larger than the campaign expenditures that we have focused on thus far ([Bertrand et al., 2014](#)). In this section we investigate whether we can detect a convergence in lobbying expenditures. The Lobby Disclosure Act (LDA) of 1995, amended subsequently by the Honest Leadership and Open Government Act of 2007, required that firms report, among other details, the amount paid to a lobbyist per filing period and the issues (out of a list of 79) that lobbying efforts are focused on. Lobbying issues range from Chemicals/Chemical Industry (CHM) and Family Issues/Abortion (FAM) to Insurance (INS) and Housing (HOU). The LDA and its modifications have never required firms to report the specific individual contacted by the lobbyist hence we cannot study convergence in lobbying targets, but only in lobbying issues. The specification for

this exercise mirrors that of Equation (1):

$$\begin{aligned} \mathbb{1}(Firm\ Lobbying_{f,r,t} > 0) = & \alpha_1 \mathbb{1}(Investor\ Lobbying_{i,r,t} > 0) \times Post_{i,f,t} \\ & + \alpha_2 \mathbb{1}(Investor\ Lobbying_{i,r,t} > 0) + \alpha_3 Post_{i,f,t} + \\ & + v_i + \omega_f + \gamma_c + \phi_t + \epsilon_{i,f,c,t} \end{aligned}$$

where *Firm Lobbying*_{*f,r,t*} is lobbying expenditures on issue *r* by firm *f* in congressional cycle *t* and *Investor Lobbying*_{*i,r,t*} is similarly defined for investor *i*. The results for this exercise are reported in Appendix Table A.8, based on specifications that parallel those of our main analyses in Table 1, and in Table A.39 in levels, but replacing the congressional district dimension with the issue dimension. We find results that are similar to those we found for campaign giving: After an acquisition, firms and investors tend to lobby on more similar topics than prior to the acquisition.

A.3 Regressions with weighted sum of investor giving

As we discussed in the main text, we perform a robustness check where we consider *all* institutional holdings of a portfolio firm's stock to examine whether a firm's PAC giving is related to the overall PAC giving of its full set of investors. We build a weighted PAC giving of investors (that puts more weight on PAC giving by investors with higher ownership stakes). To generate this weighted average PAC variable, we first identify the average ownership percentage of each investor *i* in a firm *f* during cycle *t*, and multiply the ownership percentage by the PAC giving by the *i* to the legislator representing congressional district *c*, i.e., the PAC contributions by each investor to a given politician are weighted by the investor's ownership of the firm. To construct the weighted PAC contributions, at the firm-cycle-politician level, we then sum across all investors' weighted PAC giving with a stake in the firm to obtain a single (weighted) PAC contribution figure, *Weighted sum of investor giving*. The resulting specification in binary form is:

$$\mathbb{1}(Firm\ PAC_{f,t,c} > 0) = \beta_1 \mathbb{1}(Weighted\ Investor\ PAC_{f,t,c} > 0) + \omega_f + \gamma_c + \phi_t + \epsilon_{f,c,t}. \quad (A.1)$$

and the one in levels is:

$$Firm\ PAC_{f,t,c} = \beta_1 Weighted\ Investor\ PAC_{f,t,c} + \omega_f + \gamma_c + \phi_t + \epsilon_{f,c,t}. \quad (A.2)$$

where *Firm PAC*_{*f,t,c*} measures PAC contributions by firm *f* to the politician representing congressional district *c* in congressional cycle *t*, and *Weighted Investor PAC*_{*f,t,c*} = $\sum_i OwnPerc_{i,f,t} \times PAC_{i,t,c}$ with *OwnPerc*_{*i,f,t*} the investor *i*'s ownership percentage of company *f*.

To illustrate, consider the following hypothetical example. Suppose that 45 percent of Apple's

outstanding shares are held by Investor 1 and 5 percent by Investor 2; the remaining 50 percent of shares are not owned by a 13-F investor. For simplicity, assume these shares are held throughout the entire congressional cycle (i.e., portfolio never changes during the eight 13-F quarters). Then, Investor 1’s (2’s) contribution to the politician in congressional district c will get a 45 percent (5 percent) weight when calculating Apple’s weighted investor PAC contributions to c . Suppose that Investor 1 (2) gave \$1,000 (\$2,000) to c . For this particular congressional cycle, Apple’s weighted investor PAC contribution to c will be \$550 (i.e., \$450 + \$100), placing more weight on the investor with a higher ownership stake.

Tables A.9, we find a positive association between investor and firm PAC giving.

A.4 Cosine similarity measures to detect direction of influence

In this appendix, we present details for our cosine similarity analysis as a way of distinguishing whether the increased co-movement of firm and investor PACs that we document in our main results is driven primarily by adjustment of firm or investor behavior. To this extent we build measures of similarity of giving for a firm over time and for investor over time and a seek to detect whether, around acquisitions, firms change their giving behavior more than investors (indicating a that firms’ giving is adapting) or vice versa.

We begin by defining a set of cosine similarity measures that we track around large acquisitions. We define such measures for each firm (or investor) between adjacent election cycles. Specifically, for organization j , we construct the (non-zero) vectors of PAC giving, $x_{j,t}$, which capture PAC giving to all politicians during cycle t by organization j . We then calculate the Euclidean dot product between the two vectors $x_{j,t}$ and $x_{j,t+1}$ to measure the similarity in PAC giving across election cycles:

$$\text{Cos}(x_{j,t}, x_{j,t+1}) = \frac{x_{j,t} \cdot x_{j,t+1}}{\|x_{j,t}\| \|x_{j,t+1}\|} = \frac{\sum_{c=1}^n x_{j,t,c} \times x_{j,t+1,c}}{\sqrt{\sum_{c=1}^n x_{j,t,c}^2} \times \sqrt{\sum_{c=1}^n x_{j,t+1,c}^2}}$$

where $\|x_{j,t}\|$ is defined as the Euclidean length (i.e., magnitude) of the non-zero vector $x_{j,t}$, $x_{j,t,c}$ is PAC giving by j during cycle t to the politician representing congressional district c (which could have a value of zero), and $n = 435$ is the set of congressional districts in a cycle.

The cosine similarity score, $\text{Cos}(x_{j,t}, x_{j,t+1})$, takes a value between zero and one, with a value of one indicating an identical pattern of giving across election cycles. Note that since the Euclidean dot product between $x_{j,t}$ and $x_{j,t+1}$ requires that both vectors be non-zero, whenever the organization j gives no PAC money to any politician during either election cycle t or election cycle $t+1$, $\text{Cos}(x_{j,t}, x_{j,t+1})$ is undefined.

To compare the relative disruption to firm and investor giving over time, we use $Cos(x_{ft}, x_{f,t+1}) - Cos(x_{it}, x_{i,t+1})$, the difference between the firm's and investor's changes in cosine similarity between election cycles. A negative sign (i.e., $Cos(x_{ft}, x_{f,t+1}) < Cos(x_{it}, x_{i,t+1})$) indicates the portfolio firm changes its political giving more than the investor.

To account for the fact that investors and firms may have a different baseline level of serial correlation in their giving, we take another layer of differences, i.e. $[Cos(x_{ft}, x_{f,t+1}) - Cos(x_{f,t-1}, x_{ft})] - [Cos(x_{it}, x_{i,t+1}) - Cos(x_{i,t-1}, x_{it})]$. We also look at longer two-period differences (i.e., $[Cos(x_{ft}, x_{f,t+2}) - Cos(x_{f,t-2}, x_{ft})] - [Cos(x_{it}, x_{i,t+2}) - Cos(x_{i,t-2}, x_{it})]$), to further evaluate the robustness of our findings.

We present summary statistics for the variables used in the cosine similarity tests in Panel C of Appendix Table A.8. Note that the number of observations is far smaller in these analyses, since each cosine similarity measure is calculated based on the Euclidean distance between pairs of 435-observation vectors of political giving and, as mentioned above, the Euclidean dot is undefined for a given investor or firm when the organization has a zero vector of PAC giving in either of two adjacent election cycles.

Turning to our analysis, we separately assess changes in the between-election-cycle changes in the (cosine) similarity measures for investors and portfolio firms around a large acquisition. If investors influence firms rather than the other way around, then we would expect a greater decline in the between-cycle similarity measure for portfolio firms than for investors. This pattern would suggest that investors' giving is more stable compared to portfolio firms' giving. If instead firms' political agendas influence investors' giving, we expect the opposite pattern. If both are responsible for convergence, we may expect less of a contrast between portfolio firms and investors.

In Appendix Table A.16, in the first row, we provide the simplest comparison of $Cos(x_{it}, x_{i,t+1}) - Cos(x_{ft}, x_{f,t+1})$ around acquisition date t . We observe that, on average, investor behavior is more consistent around acquisition dates, so that $Cos(x_{it}, x_{i,t+1}) > Cos(x_{ft}, x_{f,t+1})$, indicating that giving by investors is more stable than giving by firms.

Of course, it is possible that investor PAC giving is more stable in general. We thus present the difference-in-differences in cosine similarity for the acquisition period relative to the period immediately preceding the acquisition. That is, we look at $[Cos(x_{it}, x_{i,t+1}) - Cos(x_{i,t-1}, x_{it})] - [Cos(x_{ft}, x_{f,t+1}) - Cos(x_{f,t-1}, x_{ft})]$. This difference-in-differences estimate, reported in the second row of Table tab:cosine, is 0.075 (significant at the 1 percent level), again indicating that investors are relatively more stable, compared to firms, or that firms move closer to investors, and not vice versa.

Based on visual inspection of the event plots in Figures 1, the convergence in giving appears to take place over at least a couple of election cycles. We thus repeat the preceding comparisons using a two-cycle window. This longer event window reduces the sample size substantially, as

it requires: (i) PAC giving by both parties across five election cycles; and (ii) firms to acquire and hold their stakes in target firms for two post-acquisition cycles. For this longer difference, the simple post-acquisition change and the difference-in-differences estimates (0.334 and 0.083 respectively) again both indicate that convergence is driven by shifts in firm behavior. In other words, this evidence further corroborates the view that investors have an influence on the political activity of the firms in their portfolios.

We offer a distinct approach in Appendix Table A.17, where we examine how *average* pre-acquisition PAC giving (over periods $t - 4$ through $t - 1$) by investors versus firms is correlated with post-acquisition giving by their counterpart; these analyses yield a similar message to the cosine similarity results, in that past investor giving predicts firm giving post-acquisition, whereas the converse is not the case.

A.5 Discussion of staggered difference-in-differences

In this section, we assess the extent to which our two-way fixed-effects model is contaminated by “bad comparisons.” We begin by noting that we face a practical difficulty in implementing current methods and associated off-the-shelf statistical packages because of the very large sample sizes in many of our analyses. As a result, we could not get these statistical packages to run the analyses we perform at the portfolio firm $\times$ investor $\times$ congressional district $\times$ congressional cycle level.

We are, however, able to implement these approaches for our cosine similarity analysis (Table A.16) where the unit of analysis is at the portfolio firm $\times$ investor $\times$ congressional cycle level and the sample size is thus much more manageable. Appendix Table A.18 follows [Sant’Anna and Zhao \(2020\)](#) and [Rios-Avila et al. \(2021\)](#) (we used the Stata package `csdid`), where we observe that the average treatment effect we estimate using this method is very similar to that of Table A.16. Table A.18 also shows the average treatment effect by group (i.e., acquisition time), which is positive in all groups and significantly so in all but 3 cases.

While we cannot implement standard approaches for our analysis at the portfolio firm $\times$ investor $\times$ congressional district $\times$ congressional cycle level, we report a series of robustness tests inspired by this new econometric literature that are meant to address the bad comparisons problem in a staggered difference-in-difference design.

Given our sample construction, it is worth emphasizing that all observations are treated at some point in the sample period, so we do not have any never-treated observations. In such cases, following on the insights of [Callaway and Sant’Anna \(2021\)](#) and [Sun and Abraham \(2021\)](#), only not-yet-treated or last-treated observations should be used as controls to avoid “bad comparisons.”

In this spirit, we report in Appendix Tables A.19 and A.20 estimates of the coefficient of interest on $\mathbb{1}(InvPAC > 0) \times \mathbb{1}(Post)$ separately by acquisition time, for the full sample and

the index subsample respectively. Each number in each table corresponds to the output of a different regression. Key to each regression is that the control group only consists of not-yet-treated observations, which we choose to be observations that will be treated after 2015 (i.e., acquisitions that took place during the 2016 or 2018 cycles, the last two cycles in our data). Furthermore, we limit the data to include years prior to 2015. So, for example, for the regressions corresponding to acquisition cycle=2000, the data consist of the group that is treated in the 2000 cycle (treated group) and the group that is treated in the 2016 or 2018 cycles (control group) and we only include data up to 2014. Similarly, for the regressions corresponding to acquisition cycle=2004, the data consists of the group that is treated in the 2004 cycle (treated group) and the group that is treated in the 2016 or 2018 cycles (control group) and we again only include data up to 2014. Appendix Table A.20 follows the same structure, but for the index inclusion sample. As is readily seen in both tables, in all but one acquisition cycle, the estimated coefficient on $\mathbb{1}(InvPAC > 0) \times \mathbb{1}(Post)$ is positive and significant.

Finally, we also report in Appendix Tables A.21 and A.22 results where we only include one congressional cycle of post-treatment data for each acquisition time, i.e., we drop all observations after the first post-acquisition cycle. By only including one period of post-treatment data, we essentially eliminate the potential source of bias this new literature has identified when the treatment effect is staggered over time and dynamic. While this an admittedly brute force approach, it is intuitive, easily implemented, sidesteps the âbad comparisonsâ when the treatment is dynamic (e.g., previously treated observations 3 periods post treatment being a control group for just treated observations). Appendix Table A.21 utilizes the full sample, while Appendix Table A.22 focuses on index-driven acquisitions. The estimated coefficient on the interaction term $\mathbb{1}(InvPAC > 0) \times \mathbb{1}(Post)$ is positive and significant, consistent with our main analysis. The point estimate is somewhat smaller than in the main analysis but this lines up with evidence we report in the paper (Figure 1) of treatment size increasing over time.

A.6 Regressions separating active and passive investors

In order to distinguish whether the main effect we estimate is coming from passive or active investors, we split specification (A.2) into active and passive investor PAC contributions as follows:

$$\begin{aligned} \mathbb{1}(Firm\ PAC_{f,t,c} > 0) &= \beta_A \mathbb{1}\left(\sum_{i \in Active} Share_{i,f,t} PAC_{i,t,c} > 0\right) \\ &+ \beta_P \mathbb{1}\left(\sum_{i \in Passive} Share_{i,f,t} PAC_{i,t,c} > 0\right) \end{aligned} \quad (A.3)$$

Results appear in Appendix Table A.25 and are discussed in the main text. We also report the results of the above analysis in levels in Appendix Table A.38.

A.7 Matching institutional investors to FEC employee contribution data

In this appendix we provide further details on the process by which 13-F investors were matched to Federal Elections Commission employee contribution data. For firms that have an identical firm name in the two datasets, we match using that field. We then conduct three fuzzy matching processes using the firm name. First, we search for matches between the institutional investor name list and the employee giving company name list using the full name of the firm after removing special characters. We then conduct a second fuzzy matching process after removing a subset of words that commonly appear in our list of institutional investors, but we may not see as often in the employee giving company name list dataset. We then conduct a third fuzzy matching process using the first word of each name after removing common words in order to mitigate issues with additional “filler” words in the institutional investor list. For example, an employee may report their firm name as “ABC,” while in the institutional investor list, the firm may be known as “ABC Investment Company.” We determined that many of these cases had low similarity scores in our first two methods despite being the same firm. For all processes, we use Levenshtein distance to calculate a similarity score for these matches (Package available at <https://pypi.org/project/fuzzywuzzy/>). We use this method after testing several matching methods with a subset of the data. We manually review these matches to determine a logical score threshold for a match. For this matching process we determined this to be a match score of 79. We also use a machine learning approach to confirm additional matches between the datasets. We combine all the potential matches from these different methods and they are then manually verified by our team of research assistants. We then conduct an additional verification using a Google search-based method on matches that the team cannot fully confirm in the spirit of [Autor et al. \(2020\)](#). We use an API to collect the first search result for each field and compare them. If these results match, we consider these firms to be the same. For firms that do not match using this method, we have a research assistant manually Google each of these search terms to confirm that there is no relation between the firms.

A.8 Appendix Tables

Table A.1: Summary Statistics

This table provides summary statistics. *Firm PAC Giving* is the total political giving by a firm with a PAC to a particular congressional district during a given cycle. *Investor PAC Giving* is the total political giving by an investor with a PAC to a particular congressional district during a given cycle. *Fraction to Republicans* is total political giving to the Republican party divided by the sum of political giving to both the Democratic and Republican parties during a given cycle. We further break down the fraction to Republicans by private versus publicly traded institutional investors.

	10th	Q1	Median	Mean	Q3	90th	Std. Dev.	Obs.
<i>Panel A: PAC Giving</i>								
<u>Firm-District-Cycle data</u>								
<i>Firm PAC giving</i>	0	0	0	\$195	0	\$1,000	\$953	8,264,390
<i>No. of districts receiving $PAC_{f,c,t}$</i>	2	6	20	39	53	99	49	8,264,390
<i>Firm giving with $PAC_{f,c,t} > 0$</i>	\$500	\$500	\$1,000	\$2,165	\$2,500	\$5,000	\$2,409	746,238
<u>Investor-District-Cycle data</u>								
<i>Investor PAC giving</i>	0	0	0	\$174	0	0	\$895	2,199,298
<i>No. of districts receiving $PAC_{i,c,t}$</i>	2	4	18	35	48	90	46	2,199,298
<i>Investor giving with $PAC_{i,c,t} > 0$</i>	\$500	\$500	\$1,000	\$2,124	\$2,500	\$5,000	\$2,379	179,909
<i>Panel B: Partisanship: Fraction to Republicans</i>								
<u>Firm-Cycle data</u>								
<i>All firms</i>	0.000	0.211	0.461	0.474	0.722	1.000	0.327	21,782
<u>Investor-Cycle data</u>								
<i>All investors</i>	0.125	0.340	0.526	0.522	0.714	0.945	0.279	2,163
<i>Private investors</i>	0.063	0.329	0.519	0.516	0.727	1.000	0.295	1,375
<i>Public investors</i>	0.217	0.366	0.532	0.533	0.694	0.883	0.250	788

Table A.1: Summary Statistics (cont.)

$Cos[x_{f,t}, x_{f,t+1}]$ is the cosine similarity score between the firm's PAC giving during two consecutive cycles around large stock acquisitions, and $Cos[x_{i,t}, x_{i,t+1}]$ is the one for investors. We construct the $Cos[x_{f,t}, x_{f,t+2}]$ and $Cos[x_{i,t}, x_{i,t+2}]$ cosine similarity scores using the equivalent approach but with two cycle differences (e.g., comparing congressional cycle giving in 2000 and 2004) for firms and investors, respectively.

	Mean	Std. Dev.	Number of Obs.
<i>Panel C: Cosine Similarity</i>			
<u>Investor-Firm-Cycle data</u>			
$Cos[x_{f,t}, x_{f,t+1}]$	0.1912	0.1992	108,038
$Cos[x_{i,t}, x_{i,t+1}]$	0.5971	0.2011	77,184
$Cos[x_{f,t}, x_{f,t+1}] - Cos[x_{f,t-1}, x_{f,t}]$	-0.1011	0.2341	89,319
$Cos[x_{i,t}, x_{i,t+1}] - Cos[x_{i,t-1}, x_{i,t}]$	-0.0034	0.2186	66,467
$Cos[x_{f,t}, x_{f,t+2}]$	0.1991	0.2043	82,719
$Cos[x_{i,t}, x_{i,t+2}]$	0.5025	0.1933	69,747
$Cos[x_{f,t}, x_{f,t+2}] - Cos[x_{f,t-2}, x_{f,t}]$	-0.1106	0.2334	66,079
$Cos[x_{i,t}, x_{i,t+2}] - Cos[x_{i,t-2}, x_{i,t}]$	-0.0017	0.2259	60,065

Table A.2: Summary of acquisition and divestment events

This table presents summary statistics relative to the frequency and size of acquisition and divestment events. New ownership share is defined as the ratio of stocks owned by new investors divided by the total number of stocks for the firm-investor pairs included in the sample, a similar definition is used for the divestment sample where we look at the divestment amount instead of the acquisition amount. The fraction of firms that lobby is calculated by taking the number of firms that lobby at least once in our sample divided by all firms. For the index sample, we examine what the fraction of firms that lobby are eventually acquired by indexers due to an index inclusion event.

	All acquisitions	Index acquisitions
Total number of acquisitions over the sample period	67,541	5,601
Average number of acquisitions by cycle	3,377	622
Average number of acquisitions by firm-cycle	5.9	2.58
Percentage share of firms that lobby	32%	56%
Average new ownership share by firm-cycle	14.7%	7.3%
Average firm size by cycle (\$ millions)	7,469	10,163
Average investor size by cycle (\$ millions)	5,494	7,760
	All divestments	Index divestments
Total number of divestments over the sample period	25,350	1,082
Average number of divestments by cycle	1,268	83
Average number of divestments by firm-cycle	2.9	1.3
Percentage share of firms that lobby	32%	57%
Average new divestment share by firm-cycle	7.1%	3.7%
Average firm size by cycle (\$ millions)	5,051	5,660
Average investor size by cycle (\$ millions)	7,157	13,292

Table A.3: Summary of individual employee contributions

This table presents summary statistics for the individual political contributions by employees of 13-F asset management firms. Panel A provides details related the contributing employee numbers and dollar amounts from employees at a 13-F investment firm to a specific incumbent during a given cycle, starting from 1990. Panel B provides the average number of employees of the largest asset management firms who make personal political contributions, and Panel C lists the employees with the highest total contribution amount to any political committee.

Panel A: Descriptive Statistics		All	Indexers
Total number of investment firms with individual contributions data		2,498	1,137
Average number of contributing employees by investor-cycle		7.7	7.3
Average number of contributing employees by investor-cycle if investor has a PAC		13.7	11.3
Average number of contributing employees by investor-cycle if investor has no PAC		4.7	5.0
Fraction of contributing executive employees by investor-cycle if investor		29%	27%
Fraction of contributing executive employees by investor-cycle if investor has a PAC		23%	28%
Fraction of contributing executive employees by investor-cycle if investor has no PAC		31%	24%
Average total employee contributions to politicians at the investor-cycle-employee level		\$2,039	\$1,385
Average total contributions to politicians by all employees at the investor-cycle level		\$15,733	\$10,516
Panel B: Largest investors by AUM		# of contributing employees	
BlackRock		59	
Vanguard		73	
Fidelity		161	
State Street		83	
Morgan Stanley		835	
JP Morgan		320	
Goldman Sachs		380	
Panel C: Largest individual contributors		Investment Firm	
Ken Griffin, CEO		Citadel Group	
Donald Sussman, President		Paloma Partners	
Steve Mandel, President		Lone Pine Capital	
Robert Mercer, CEO		Renaissance Technologies	

Table A.4: Summary of shareholder proposals

This table presents summary statistics for the shareholder proposals provided in the Institutional Shareholder Services (ISS) database. Panel A lists the ten most frequently appearing shareholder proposals by the general description of the agenda of the given shareholder proposal. The number of such shareholder proposals and the fraction among all shareholder proposals are provided. Panel B repeats the same exercise, but focuses only on the set of shareholder proposals that are deemed contentious, where contentious is defined as a shareholder proposal that was received on a topic that previously garnered at least 45% support from shareholders.

Panel A: Most Frequent Agenda Topics Among All Shareholder Proposals	Number	Fraction
Elect Directors (Opposition Slate)	2,304	15.9%
Require Independent Board Chair	906	6.2%
Declassify the Board of Directors	689	4.7%
Political Contributions Disclosure	665	4.6%
Require a Majority Vote for the Election of Directors	575	4.0%
Amend Articles/Bylaws/Charter	479	3.3%
Provide Right to Act by Written Consent	416	2.9%
Political Lobbying Disclosure	346	2.4%
Company Specific-Governance Related	324	2.2%
Adopt Proxy Access Right	299	2.1%
Panel B: Most Frequent Agenda Topics Among Contentious Shareholder Proposals	Number	Fraction
Elect Directors (Opposition Slate)	310	23.7%
Declassify the Board of Directors	152	11.6%
Amend Articles/Bylaws/Charter	147	11.3%
Provide Right to Act by Written Consent	129	9.9%
Require a Majority Vote for the Election of Directors	75	5.7%
Submit Shareholder Rights Plan (Poison Pill) to Shareholder Vote	52	4.0%
Require Independent Board Chair	52	4.0%
Reduce Supermajority Vote Requirement	50	3.8%
Company Specific-Governance Related	36	2.8%
Political Contributions Disclosure	28	2.1%

Table A.5: Descriptive statistics for events included in the analysis of shareholder proposals and ESG incidents

This table presents summary statistics related to the events included in the analysis of shareholder proposals and ESG incidents. Panel A lists the frequencies of events that take on a value of one for each firm $\times$ congressional cycle pair. In this panel, we provide the total number of firm $\times$ congressional cycle pairs, as well as the fraction of firms that have a value of one for each specific event, relative to the overall total of firm $\times$ congressional cycle pairs included in the analysis. Panel B repeats the same analysis but conducts it at the firm level by examining whether each firm experienced at least one incident of the given event. Data on shareholder and management proposals are sourced from ISS, while the data on ESG incidents are obtained from RepRisk.

Panel A: Firm $\times$ cycle level summary	Number	Fraction
At least one shareholder proposal	1,782	38.9%
At least one contentious shareholder proposal	344	7.5%
At least one contentious management proposal	2,524	55.1%
At least one contentious shareholder or management proposal	2,644	57.7%
At least one special meeting	377	8.2%
At least one major ESG crisis	1,624	31.3%
Panel B: Firm level summary	Number	Fraction
At least one shareholder proposal	504	58.2%
At least one contentious shareholder proposal	158	18.2%
At least one contentious management proposal	489	56.5%
At least one contentious shareholder or management proposal	643	74.2%
At least one special meeting	293	33.8%
At least one major ESG crisis	470	43.3%

Table A.6: Firms' and investors' PAC giving - Politician Fixed Effects

This table presents the association between the PAC contributions by firms and their investors' PAC contributions at the congressional cycle – politician level during the cycles around a large stock acquisition. The data are, therefore, at the investor – firm – congressional cycle – politician level. $\mathbb{1}(\text{Post})$ denotes observations that occur after the acquisition has occurred. The dependent variable is an indicator variable which denotes that PAC contributions by a firm are greater than zero; $\mathbb{1}(\text{Investor's PAC} > 0)$ is similarly defined. The mean of the dependent variable is 0.011. Standard errors (in parenthesis) are double clustered at the firm and investor levels.

Dep. Var.: $\mathbb{1}(\text{Firm's PAC} > 0)$				
	(1)	(2)	(3)	(4)
$\mathbb{1}(\text{Inv's PAC} > 0) \times \mathbb{1}(\text{Post})$	0.0252*** (0.00542)	0.0258*** (0.00552)	0.0163*** (0.00345)	0.0107*** (0.00234)
$\mathbb{1}(\text{Investor's PAC} > 0)$	0.0501*** (0.00436)	0.0502*** (0.00440)	0.0437*** (0.00367)	0.0418*** (0.00325)
$\mathbb{1}(\text{Post})$	-0.000256 (0.000183)	-0.000358* (0.000199)	-8.34e-05 (0.000156)	-0.000155*** (4.50e-05)
Fixed Effects				
Firm	X		X	
Investor	X		X	
Congressional Cycle	X	X		
Politician	X	X		
Firm $\times$ Investor		X		X
Firm $\times$ Politician				X
Firm $\times$ Congressional Cycle				X
Investor $\times$ Politician				X
Investor $\times$ Congressional Cycle				X
Congressional Cycle $\times$ Politician			X	X
N	339,785,165	339,785,165	339,785,165	339,451,016
R^2	0.030	0.030	0.038	0.238

Notes: *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

Table A.7: Firms' and investors' PAC giving - Excluding the largest 4 institutional investors

This table presents the association between the PAC contributions by firms and their investors' PAC contributions at the congressional cycle–district level during the cycles around a large stock acquisition by excluding the largest 4 institutional investors (i.e., BlackRock, Vanguard, State Street, and Fidelity). The data are, therefore, at the investor–firm–congressional cycle–district level. $\mathbb{1}(\text{Post})$ denotes observations that occur after the acquisition has occurred. The dependent variable is an indicator variable which denotes that PAC contributions by a firm are greater than zero; $\mathbb{1}(\text{Investor's PAC} > 0)$ is similarly defined. The mean of the dependent variable is 0.0104. Standard errors (in parenthesis) are double clustered at the firm and investor levels.

Dep. Var.: $\mathbb{1}(\text{Firm's PAC} > 0)$				
	(1)	(2)	(3)	(4)
$\mathbb{1}(\text{Inv's PAC} > 0) \times \mathbb{1}(\text{Post})$	0.0253*** (0.00629)	0.0260*** (0.00643)	0.0160*** (0.00354)	0.0128*** (0.00312)
$\mathbb{1}(\text{Investor's PAC} > 0)$	0.0543*** (0.00484)	0.0545*** (0.00488)	0.0440*** (0.00379)	0.0430*** (0.00368)
$\mathbb{1}(\text{Post})$	-0.000242 (0.000188)	-0.000345* (0.000202)	-5.61e-05 (0.000152)	-0.000187*** (5.98e-05)
Fixed Effects				
Firm	X		X	
Investor	X		X	
Congressional Cycle	X	X		
Congressional District	X	X		
Firm $\times$ Investor		X		X
Firm $\times$ Congressional District				X
Firm $\times$ Congressional Cycle				X
Investor $\times$ Congressional District				X
Investor $\times$ Congressional Cycle				X
Congressional Cycle $\times$ District			X	X
N	327,565,333	327,565,333	327,565,333	327,544,666
R^2	0.024	0.024	0.037	0.135

Notes: *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

Table A.8: Firms' and investors' lobbying expenditure

This table presents the association between the lobbying expenditure by firms and their investors' lobbying expenditure at the congressional cycle – issue level during the cycles around a large stock acquisition. The data are, therefore, at the investor – firm – congressional cycle – issue level. $\mathbb{1}(\text{Post})$ denotes observations that occur after the acquisition has occurred. The dependent variable is an indicator variable which denotes that lobbying expenditures by a firm made on a given issue are greater than zero during a particular cycle; the independent variable for the given acquiring institutional investor is similarly defined. The mean of the dependent variable is 0.028. Standard errors (in parenthesis) are double clustered at the firm and investor levels.

Dep. Var.: $\mathbb{1}(\text{Lobby}_{\text{Firm}} > 0)$	(1)	(2)	(3)	(4)
$\mathbb{1}(\text{Lobby}_{\text{Investor}} > 0) \times \mathbb{1}(\text{Post})$	0.0411*** (0.00799)	0.0424*** (0.00816)	0.0280*** (0.00695)	0.0288*** (0.00723)
$\mathbb{1}(\text{Lobby}_{\text{Investor}} > 0)$	0.00241 (0.00437)	0.00179 (0.00447)	0.00242 (0.00394)	0.00216 (0.00408)
$\mathbb{1}(\text{Post})$	-0.000781** (0.000346)	-0.000822* (0.000447)	-0.000581* (0.000334)	-0.000419*** (0.000114)
Fixed Effects				
Firm	X		X	
Investor	X		X	
Congressional Cycle	X	X		
Lobby Issue	X	X		
Firm $\times$ Investor		X		X
Firm $\times$ Lobby Issue				X
Firm $\times$ Congressional Cycle				X
Investor $\times$ Lobby Issue				X
Investor $\times$ Congressional Cycle				X
Congressional Cycle $\times$ Lobby Issue			X	X
N	40,376,357	40,376,357	40,376,357	40,376,357
R^2	0.128	0.130	0.135	0.153

Notes: *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

Table A.9: Firms' PAC contributions and weighted investor PAC contributions

This table presents the association between the PAC contributions by firms and the weighted sum of their investors' PAC contributions at the congressional cycle – congressional candidate level. The data are, therefore, at the firm – congressional cycle – congressional district level. The dependent variable is an indicator variable which denotes that PAC contributions by a firm are greater than zero to a given district during a particular cycle. $\mathbb{1}(\text{Weighted sum of investor PAC} > 0)$ takes the value of one if the total weighted contribution of all investors with a stake in the firm is positive. This total is calculated by multiplying each investor's ownership percentage by their contribution to the district during the cycle, and then summing these values across all investors to obtain a firm – cycle level measure. The mean of the dependent variable is 0.015. Standard errors are clustered at the firm level.

Dep. Var.: $\mathbb{1}(\text{Firm's PAC} > 0)$	(1)	(2)	(3)	(4)	(5)
$\mathbb{1}(\text{Weighted sum of investor PAC} > 0)$	0.0286*** (0.000601)	0.0226*** (0.000567)	0.0273*** (0.000658)	0.0243*** (0.000641)	0.0224*** (0.000786)
Fixed Effects					
Firm	X				
Congressional Cycle	X	X			
Congressional District			X		
Firm $\times$ Congressional District		X		X	X
Firm $\times$ Congressional Cycle			X	X	X
Congressional Cycle $\times$ District					X
N	5,870,095	5,707,837	5,870,095	5,707,837	5,707,837
R^2	0.018	0.204	0.029	0.210	0.219

Notes: *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

Table A.10: Firms' and investors' fraction of PAC contributions to Republicans

This table presents whether the fraction of total PAC contributions given to Republicans at the congressional cycle level by newly acquired portfolio firms changes around large stock acquisitions. The dependent variable is defined as the fraction of overall PAC contributions given to Republicans by the portfolio firm (i.e., total Republican giving divided by total giving to Republicans and Democrats) during the given congressional cycle; *Investor's Fraction to Republicans* is similarly defined. Standard errors (in parenthesis) are double clustered at the firm and investor levels.

Dependent Variable: Firm's Fraction to Republicans					
	(1)	(2)	(3)	(4)	(5)
Investor's Fraction to Republicans $\times \mathbb{1}(\text{Post})$	0.0133 (0.0180)	0.0396*** (0.00931)	0.0297*** (0.00932)	0.0280*** (0.00933)	0.0299*** (0.0104)
Investor's Fraction to Republicans	0.0697*** (0.0173)	0.0402*** (0.00465)	0.0955*** (0.0103)	0.0885*** (0.0101)	0.0927*** (0.0108)
$\mathbb{1}(\text{Post})$	0.0606*** (0.00512)	-0.0291*** (0.00405)	-0.0206*** (0.00418)	-0.0307*** (0.00421)	-0.0384*** (0.00479)
Fixed Effects					
Firm	X	X		X	
Congressional Cycle		X	X	X	X
Investor			X	X	
Firm $\times$ Investor					X
N	793,307	793,307	793,291	793,280	792,093
R^2	0.154	0.204	0.069	0.205	0.214

Notes: *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

Table A.11: Firms' and investors' PAC contributions – Controlling for Changes in Active Ownership

This table presents the association between the PAC contributions by firms and their investors' PAC contributions at the congressional cycle–district level during the cycles around a large stock acquisition. The data are, therefore, at the investor–firm–congressional cycle–district level. $\mathbb{1}(\text{Post})$ denotes observations that occur after the acquisition has occurred. The dependent variable is an indicator variable which denotes that PAC contributions by a firm are greater than zero; $\mathbb{1}(\text{Investor's PAC} > 0)$ is similarly defined. The variable, *Active*, is the total percentage of ownership by active investors at the firm $\times$ cycle level. The mean of the dependent variable is 0.012. Standard errors (in parenthesis) are double clustered at the firm and investor levels.

Dep. Var.: $\mathbb{1}(\text{Firm's PAC} > 0)$				
	(1)	(2)	(3)	(4)
$\mathbb{1}(\text{Inv's PAC} > 0) \times \mathbb{1}(\text{Post})$	0.0554*** (0.00653)	0.0565*** (0.00646)	0.0315*** (0.00442)	0.0259*** (0.00377)
$\mathbb{1}(\text{Inv's PAC} > 0) \times \text{Active}$	-0.0780*** (0.0179)	-0.0809*** (0.0184)	-0.0812*** (0.0186)	-0.0690*** (0.0155)
$\mathbb{1}(\text{Investor's PAC} > 0)$	0.0493*** (0.00491)	0.0493*** (0.00492)	0.0350*** (0.00353)	0.0346*** (0.00325)
$\mathbb{1}(\text{Post})$	-0.000812 (0.000604)	-0.000855 (0.000633)	-0.000348 (0.000589)	-0.000313*** (9.97e-05)
<i>Active</i>	-0.00215 (0.00219)	-0.00223 (0.00221)	-0.00203 (0.00221)	- -
Fixed Effects				
Firm	X		X	
Investor	X		X	
Congressional Cycle	X	X		
Congressional District	X	X		
Firm $\times$ Investor		X		X
Firm $\times$ Congressional District				X
Firm $\times$ Congressional Cycle				X
Investor $\times$ Congressional District				X
Investor $\times$ Congressional Cycle				X
Congressional Cycle $\times$ District			X	X
<i>N</i>	38,356,758	38,356,758	38,356,758	38,355,867
<i>R</i> ²	0.028	0.028	0.047	0.126

Notes: *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

Table A.12: Firms' and index investors' PAC contributions – Effect on co-movement of Active Ownership (three-way interaction)

This table presents the association between the PAC contributions by firms and their investors' PAC contributions at the congressional cycle–district level during the cycles around a large stock acquisition using the strict indexer sample as defined in Table 2. The data are, therefore, at the investor–firm–congressional cycle–district level. $\mathbb{1}(\text{Post})$ denotes observations that occur after the acquisition has occurred. The dependent variable is an indicator variable which denotes that PAC contributions by a firm are greater than zero; $\mathbb{1}(\text{Investor's PAC} > 0)$ is similarly defined. *Active* is the total percentage of ownership by active investors at the firm $\times$ cycle level. Standard errors are double clustered at the firm and investor level.

Depend. Var.: $\mathbb{1}(\text{Firm's PAC} > 0)$		
	(1)	(2)
$\mathbb{1}(\text{Inv's PAC} > 0) \times \mathbb{1}(\text{Post}) \times \text{Active}$	-0.0943*** (0.0261)	-0.0748*** (0.0205)
$\mathbb{1}(\text{Inv's PAC} > 0) \times \mathbb{1}(\text{Post})$	0.0462*** (0.00718)	0.0372*** (0.00584)
$\mathbb{1}(\text{Inv's PAC} > 0) \times \text{Active}$	-0.0501*** (0.0103)	-0.0421*** (0.00770)
$\mathbb{1}(\text{Post}) \times \text{Active}$	0.0156*** (0.00161)	0.00228*** (0.000540)
$\mathbb{1}(\text{Inv's PAC} > 0)$	0.0340*** (0.00266)	0.0337*** (0.00234)
$\mathbb{1}(\text{Post})$	-0.00352*** (0.000480)	-0.000775*** (0.000138)
<i>Active</i>	-0.00566*** (0.000650)	- -
Fixed Effects		
Firm	X	
Investor	X	
Congressional Cycle	X	
Congressional District	X	
Firm $\times$ Investor		X
Firm $\times$ Congressional District		X
Firm $\times$ Congressional Cycle		X
Investor $\times$ Congressional District		X
Investor $\times$ Congressional Cycle		X
Congressional Cycle $\times$ District		X
<i>N</i>	38,356,758	38,355,867
<i>R</i> ²	0.047	0.126

Notes: *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

Table A.13: Firms' PAC contributions and weighted PAC contributions by indexers (index investors only)

This table presents the association between the PAC contributions by firms and the weighted sum of their index investors' PAC contributions at the congressional cycle – congressional district level using the strict indexer sample as defined in Table 2. The data are, therefore, at the firm – congressional cycle – congressional district level. The outcome variable is the total dollar amount of PAC contributions the given index investor gave to the given congressional district during the given congressional cycle. $\mathbb{1}(\text{Weighted sum of indexer PAC} > 0)$ takes the value of one if the total weighted contribution of all index investors with a stake in the firm is positive. This total is calculated by multiplying each index investor's ownership percentage by their contribution to the district during the cycle, and then summing these values across all investors to obtain a firm – cycle level measure. Standard errors are clustered at the firm level.

Dep. Var.: $\mathbb{1}(\text{Firm's PAC} > 0)$	(1)	(2)	(3)	(4)	(5)
$\mathbb{1}(\text{Weighted sum of indexer PAC} > 0)$	0.0173*** (0.000552)	0.0143*** (0.000566)	0.0158*** (0.000602)	0.0156*** (0.000620)	0.0113*** (0.000745)
Fixed Effects					
Firm	X				
Congressional Cycle	X	X			
Congressional District			X		
Firm $\times$ Congressional District		X		X	X
Firm $\times$ Congressional Cycle			X	X	X
Congressional Cycle $\times$ District					X
N	2,293,991	2,277,987	2,293,991	2,277,987	2,277,987
R^2	0.012	0.140	0.022	0.145	0.159

Notes: *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

Table A.14: Firms' and passive investors' PAC contributions – S&P index acquisitions by the largest three generalist indexers

This table presents the association between the PAC contributions by firms and their investors' PAC contributions at the congressional cycle–district level during the cycles around large stock acquisitions due to S&P index inclusion by State Street, Vanguard, and Barclays Global Investors (that later becomes part of the BlackRock group). The data are, therefore, at the investor–firm–congressional cycle–district level. $\mathbb{1}(\text{Post})$ denotes observations that occur after the acquisition has occurred. The dependent variable is an indicator variable which denotes that PAC contributions by a firm are greater than zero; $\mathbb{1}(\text{Investor's PAC} > 0)$ is similarly defined. Standard errors are clustered at the firm level rather than double clustered at the firm and investor levels due to the fact that there are only three investors in this analysis.

Dep. Var.: $\mathbb{1}(\text{Firm's PAC} > 0)$				
	(1)	(2)	(3)	(4)
$\mathbb{1}(\text{Inv's PAC} > 0) \times \mathbb{1}(\text{Post})$	0.0490*** (0.00788)	0.0491*** (0.00788)	0.0206** (0.00940)	0.0184** (0.00856)
$\mathbb{1}(\text{Investor's PAC} > 0)$	0.0742*** (0.00600)	0.0742*** (0.00600)	0.00732 (0.00448)	0.00827* (0.00457)
$\mathbb{1}(\text{Post})$	-0.00230 (0.00198)	-0.00230 (0.00197)	0.000189 (0.00188)	-0.00274** (0.00128)
Fixed Effects				
Firm	X		X	
Investor	X		X	
Congressional Cycle	X	X		
Congressional District	X	X		
Firm $\times$ Investor		X		X
Firm $\times$ Congressional District				X
Firm $\times$ Congressional Cycle				X
Investor $\times$ Congressional District				X
Investor $\times$ Congressional Cycle				X
Congressional Cycle $\times$ District			X	X
N	1,077,557	1,077,557	1,077,557	1,077,557
R^2	0.041	0.041	0.070	0.139

Notes: *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

Table A.15: Firms' and indexer investors' PAC contributions – Divestments

This table presents the association between the PAC contributions by firms and their investors' PAC contributions at the congressional cycle–district level during the cycles around a large stock divestments. The data are, therefore, at the investor–firm–congressional cycle–district level. $\mathbb{1}(\text{Post})$ denotes observations that occur after the divestment has occurred, and take the value of zero for the observations that occur during the periods in which the investor has an ownership stake in the given firm. The dependent variable is an indicator variable which denotes that PAC contributions to a given incumbent by a firm are greater than zero; $\mathbb{1}(\text{Investor's PAC} > 0)$ is similarly defined. The definitions of indexer sample constructions used here is the same as that described in the notes for Table 2 except that this table focuses on divestments. Standard errors are double clustered at the firm and investor levels.

Dep. Var.: $\mathbb{1}(\text{Firm's PAC} > 0)$								
	Quasi-Indexer Sample				Strict Indexer Sample			
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
$\mathbb{1}(\text{Investor's PAC} > 0) \times \mathbb{1}(\text{Post})$	-0.091*** (0.0328)	-0.093*** (0.0335)	-0.088*** (0.0303)	-0.080*** (0.0282)	-0.045* (0.0241)	-0.045* (0.0242)	-0.046** (0.0207)	-0.027* (0.0158)
$\mathbb{1}(\text{Investor's PAC} > 0)$	0.227*** (0.0347)	0.230*** (0.0352)	0.205*** (0.0316)	0.197*** (0.0306)	0.171*** (0.0207)	0.172*** (0.0206)	0.149*** (0.0199)	0.127*** (0.0169)
$\mathbb{1}(\text{Post})$	0.00298*** (0.000877)	0.00333*** (0.000984)	0.00296*** (0.000827)	0.00188** (0.000741)	0.000585 (0.00139)	0.000614 (0.00145)	0.000666 (0.00133)	0.000484 (0.000365)
Fixed Effects								
Firm	X		X		X		X	
Investor	X		X		X		X	
Congressional Cycle	X	X			X	X		
Congressional District	X	X			X	X		
Firm $\times$ Investor		X		X		X		X
Firm $\times$ Congressional District				X				X
Firm $\times$ Congressional Cycle				X				X
Investor $\times$ Congressional District				X				X
Investor $\times$ Congressional Cycle				X				X
Congressional Cycle $\times$ District			X	X			X	X
N	51,741,695	51,741,695	51,741,695	51,724,604	2,438,549	2,438,549	2,437,273	2,425,710
R^2	0.054	0.055	0.070	0.188	0.058	0.058	0.079	0.280

Notes: *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

Table A.16: Persistence of firm and investor giving patterns – Cosine similarity analysis

This table provides the difference in means of the cosine similarity scores between cycles t and $t+1$ for firms and for investors. In particular, this test examines whether there is a difference in the cosine similarity scores between the firm's PAC giving during two consecutive cycles (i.e., $Cos[x_{f,t}, x_{f,t+1}]$) and the cosine similarity scores between the investor's PAC giving during two consecutive cycles (i.e., $Cos[x_{i,t}, x_{i,t+1}]$). The j term in the $Cos[x_{j,t}, x_{j,t+1}]$ expression, therefore, is either equal to f or i . It is also important to note that the firm adapts more than the investor if, on average, $Cos[x_{i,t}, x_{i,t+1}] > Cos[x_{f,t}, x_{f,t+1}]$. As well, the term *Difference in means* is defined as the difference between the means of the given two cosine similarity scores of the firm and the investor (e.g., $Cos[x_{j,t}, x_{j,t+1}] - Cos[x_{j,t-1}, x_{j,t}]$). Rows three and four use an alternative definition of cosine similarity. Rather than comparing the two adjacent cycles, the last two rows compare giving similarity across two-cycle periods.

	Investors	Firms	Difference in means	<i>P</i> -value of Difference	<i>N</i>
$Cos[x_{j,t}, x_{j,t+1}]$	0.616 (0.00138)	0.183 (0.00135)	0.434*** (0.00193)	0.000	18,612
$Cos[x_{j,t}, x_{j,t+1}] - Cos[x_{j,t-1}, x_{j,t}]$	0.003 (0.00169)	-0.072 (0.00177)	0.075*** (0.00243)	0.000	15,107
$Cos[x_{j,t}, x_{j,t+2}]$	0.521 (0.00156)	0.187 (0.00159)	0.334*** (0.00223)	0.000	13,479
$Cos[x_{j,t}, x_{j,t+2}] - Cos[x_{j,t-2}, x_{j,t}]$	-0.002 (0.00198)	-0.085 (0.00212)	0.083*** (0.00288)	0.000	10,670

Table A.17: Firms' and investors' PAC contributions by using average past three cycle investor giving

This table presents the association between the PAC contributions by firms and their investors' PAC contributions at the congressional cycle – politician level during the cycles around a large stock acquisition. The data are, therefore, at the investor – firm – congressional cycle – incumbent level. $\mathbb{1}(\text{Post})$ denotes observations that occur after the acquisition has occurred. The dependent variable is an indicator variable which denotes that PAC contributions by a firm are greater than zero; $\mathbb{1}(\text{Investor's PAC} > 0)$ is similarly defined except that we use the average of contributions given to the same politician during the past three congressional cycle by the given investor. The mean of the outcome variable is 0.019. Standard errors (in parenthesis) are double clustered at the firm and investor levels.

Dep. Var.: $\mathbb{1}(\text{Firm's PAC} > 0)$	(1)	(2)	(3)	(4)
$\mathbb{1}(\text{Inv's PAC} > 0) \times \mathbb{1}(\text{Post})$	0.0139*** (0.00348)	0.0144*** (0.00348)	0.00443*** (0.00129)	0.00317*** (0.000834)
$\mathbb{1}(\text{Investor's PAC} > 0)$	0.0196*** (0.00137)	0.0197*** (0.00138)	0.0157*** (0.00151)	0.00549*** (0.000870)
$\mathbb{1}(\text{Post})$	-0.000570 (0.000538)	-0.000773 (0.000584)	0.000467 (0.000408)	-0.000407*** (9.84e-05)
Fixed Effects				
Firm	X		X	
Investor	X		X	
Congressional Cycle	X	X		
Politician	X	X		
Firm $\times$ Investor		X		X
Firm $\times$ Politician				X
Firm $\times$ Congressional Cycle				X
Investor $\times$ Politician				X
Investor $\times$ Congressional Cycle				X
Congressional Cycle $\times$ Politician			X	X
N	34,027,397	34,027,397	34,027,397	33,986,263
R^2	0.044	0.045	0.059	0.175

Notes: *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

Table A.18: Convergence of firms' and investors' contributions using cosine scores – Staggered Difference-in-Difference Estimation

This table presents how similar the firm and investor giving become around acquisitions using a staggered difference-in-difference estimation procedure. Specifically, we follow Sant'Anna and Zhao (2020) and Rios-Avila, Sant'Anna and Callaway (2021) to run the staggered difference-in-difference estimations. The outcome variable is the cosine similarity score between the firm's PAC contributions and the investor's PAC contributions; the independent variable is a post variable that takes the value of one for the cycles after the acquisition period, zero otherwise. There are 69,252 of observations in the analysis.

	Coefficient	Standard Errors	Z-Score	P-Value	Lower CI	Upper CI
Average Treatment Effect on Treated						
ATT	0.025797***	.0037327	6.91	0.00	0.0184809	0.033113
Average Treatment Effect by Group						
Average Effect	0.025083***	0.0044415	5.65	0.00	0.0163779	0.0337882
Acquisition Cycle 1984	0.0515308***	.0130979	3.93	0.00	0.0258593	0.0772023
Acquisition Cycle 1986	0.0269802**	0.0110782	2.44	0.01	0.0052673	0.0486932
Acquisition Cycle 1988	0.0128932	0.0160012	0.81	0.420	-0.0184686	0.0442549
Acquisition Cycle 1990	0.0581022***	0.0131653	4.41	0.00	0.0322987	0.0839056
Acquisition Cycle 1992	0.0512136***	0.0122613	4.18	0.00	0.027182	0.0752452
Acquisition Cycle 1994	0.0244238**	0.0109195	2.24	0.02	0.003022	0.0458257
Acquisition Cycle 1996	0.0194154*	0.0119057	1.63	0.10	-0.0039194	0.0427502
Acquisition Cycle 1998	0.0289637***	0.0071041	4.08	0.00	0.0150399	0.0428875
Acquisition Cycle 2000	0.0123015	0.0092443	1.33	0.18	-0.0058171	0.0304201
Acquisition Cycle 2002	0.0102398	0.009696	1.06	0.29	-0.008764	0.0292436
Acquisition Cycle 2004	0.0355078***	0.0085855	4.14	0.00	0.0186806	0.0523351
Acquisition Cycle 2006	0.0244682**	0.0122037	2.00	0.04	0.0005495	0.048387
Acquisition Cycle 2008	0.0078341	0.0128436	0.61	0.54	-0.0173388	0.033007
Acquisition Cycle 2010	0.0339928***	0.0132996	2.56	0.01	0.0079261	0.0600595
Acquisition Cycle 2012	0.036196***	0.0145843	2.48	0.01	0.0076114	0.0647807
Acquisition Cycle 2014	0.0174978	0.0135669	1.29	0.19	-0.0090928	0.0440884

Notes: *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

Table A.19: Firms' and investors' PAC contributions – Staggered Difference-in-Difference – Reporting only Interaction Term Coefficients from Individual Regressions (continues)

By using the the last-treated observations as a control for the early-treated observations, this table presents a version of a staggered difference-in-difference estimation of the association between the PAC contributions by firms and their investors' PAC contributions at the congressional cycle–district level during the cycles around a large stock acquisition. Each of the rows provides the estimations of the interaction term, $\mathbb{1}(\text{Investor's PAC} > 0) \times \mathbb{1}(\text{Post})$, from individual regressions following the same specification as the ones we have in our baseline regressions with the exception that we run the regressions by having only acquisitions that take place in the given cycle and the control group of pairs that will be treated at the end of the sample period (i.e., cycles 2016 and 2018). Specifically, dependent variable is an indicator variable which denotes that PAC contributions by a firm are greater than zero, and the independent variables are $\mathbb{1}(\text{Investor's PAC} > 0) \times \mathbb{1}(\text{Post})$, $\mathbb{1}(\text{Investor's PAC} > 0)$, and $\mathbb{1}(\text{Post})$. Fixed effects specifications vary by column and are reported at the end of the table on the next page. Standard errors (in parenthesis) are double clustered at the firm and investor levels.

Dep. Var.: $\mathbb{1}(\text{Firm's PAC} > 0)$				
	(1)	(2)	(3)	(4)
Acquisition Cycle=2014	0.0472*** (0.00533)	0.0473*** (0.00532)	0.0200*** (0.00570)	0.0175*** (0.00536)
Acquisition Cycle=2012	0.0577*** (0.00755)	0.0579*** (0.00757)	0.0311*** (0.00653)	0.0271*** (0.00612)
Acquisition Cycle=2010	0.0574*** (0.00767)	0.0576*** (0.00767)	0.0334*** (0.00663)	0.0282*** (0.00595)
Acquisition Cycle=2008	0.0427*** (0.00646)	0.0430*** (0.00644)	0.0190*** (0.00479)	0.0158*** (0.00424)
Acquisition Cycle=2006	0.0374*** (0.00776)	0.0379*** (0.00782)	0.0186*** (0.00694)	0.0156** (0.00623)
Acquisition Cycle=2004	0.0373*** (0.00528)	0.0375*** (0.00528)	0.0199*** (0.00353)	0.0181*** (0.00375)
Acquisition Cycle=2002	0.0144 (0.0140)	0.0148 (0.0141)	0.00374 (0.0113)	0.00325 (0.0102)
Acquisition Cycle=2000	0.0287*** (0.00662)	0.0295*** (0.00675)	0.0186*** (0.00444)	0.0171*** (0.00400)
Acquisition Cycle=1998	0.0264** (0.0119)	0.0272** (0.0120)	0.0156** (0.00686)	0.0170*** (0.00606)
Acquisition Cycle=1996	0.0264*** (0.00653)	0.0267*** (0.00648)	0.0152*** (0.00482)	0.0142*** (0.00411)
Acquisition Cycle=1994	0.0337*** (0.00601)	0.0339*** (0.00604)	0.0208*** (0.00475)	0.0184*** (0.00400)
Acquisition Cycle=1992	0.0406*** (0.00590)	0.0407*** (0.00596)	0.0268*** (0.00674)	0.0228*** (0.00574)

Table A.19: Firms' and investors' PAC contributions – Staggered Difference-in-Difference – Reporting only Interaction Term Coefficients from Individual Regressions (continued)

By using the the last-treated observations as a control for the early-treated observations, this table presents a version of a staggered difference-in-difference estimation of the association between the PAC contributions by firms and their investors' PAC contributions at the congressional cycle–district level during the cycles around a large stock acquisition. Each of the rows provides the estimations of the interaction term, $\mathbb{1}(\text{Investor's PAC} > 0) \times \mathbb{1}(\text{Post})$, from individual regressions following the same specification as the ones we have in our baseline regressions with the exception that we run the regressions by having only acquisitions that take place in the given cycle and the control group of pairs that will be treated at the end of the sample period (i.e., cycles 2016 and 2018). Specifically, dependent variable is an indicator variable which denotes that PAC contributions by a firm are greater than zero, and the independent variables are $\mathbb{1}(\text{Investor's PAC} > 0) \times \mathbb{1}(\text{Post})$, $\mathbb{1}(\text{Investor's PAC} > 0)$, and $\mathbb{1}(\text{Post})$. Fixed effects specifications vary by column and are reported at the end of the table on the next page. Standard errors (in parenthesis) are double clustered at the firm and investor levels.

Dep. Var.: $\mathbb{1}(\text{Firm's PAC} > 0)$				
	(1)	(2)	(3)	(4)
Acquisition Cycle=1990	0.0420*** (0.00556)	0.0422*** (0.00554)	0.0271*** (0.00609)	0.0229*** (0.00533)
Acquisition Cycle=1988	0.0336*** (0.00592)	0.0339*** (0.00592)	0.0205*** (0.00525)	0.0178*** (0.00458)
Acquisition Cycle=1986	0.0307*** (0.00425)	0.0309*** (0.00426)	0.0203*** (0.00363)	0.0175*** (0.00334)
Acquisition Cycle=1984	0.0305*** (0.00585)	0.0308*** (0.00587)	0.0206*** (0.00465)	0.0178*** (0.00395)
Acquisition Cycle=1982	0.0431*** (0.00548)	0.0431*** (0.00549)	0.0298*** (0.00611)	0.0223*** (0.00580)
Fixed Effects				
Firm	X		X	
Investor	X		X	
Congressional Cycle	X	X		
Congressional District	X	X		
Firm $\times$ Investor		X		X
Firm $\times$ Congressional District				X
Firm $\times$ Congressional Cycle				X
Investor $\times$ Congressional District				X
Investor $\times$ Congressional Cycle				X
Congressional Cycle $\times$ District			X	X

Notes: *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

Table A.20: Firms' and investors' PAC contributions – Staggered Difference-in-Difference – Reporting only Interaction Term Coefficients from Individual Regressions – Index Cases

By using the the last-treated observations as a control for the early-treated observations, this table presents a version of a staggered difference-in-difference estimation of the association between the PAC contributions by firms and their index investors' PAC contributions using the strict indexer sample as defined in Table 2. Each of the rows provides the estimations of the interaction term, $\mathbb{1}(\text{Investor's PAC} > 0) \times \mathbb{1}(\text{Post})$, from individual regressions following the same specification as the ones we have in our baseline regressions with the exception that we run the regressions by having only acquisitions that take place in the given cycle and the control group of pairs that will be treated at the end of the sample period (i.e., cycles 2016 and 2018). Specifically, dependent variable is an indicator variable which denotes that PAC contributions by a firm are greater than zero, and the independent variables are $\mathbb{1}(\text{Investor's PAC} > 0) \times \mathbb{1}(\text{Post})$, $\mathbb{1}(\text{Investor's PAC} > 0)$, and $\mathbb{1}(\text{Post})$. Our index data starts only from the cycle 2000. Standard errors (in parenthesis) are double clustered at the firm and investor levels.

Dep. Var.: $\mathbb{1}(\text{Firm's PAC} > 0)$				
	(1)	(2)	(3)	(4)
Acquisition Cycle=2014	0.0519*** (0.00758)	0.0521*** (0.00757)	0.0202*** (0.00660)	0.0171*** (0.00609)
Acquisition Cycle=2012	0.0565*** (0.00688)	0.0566*** (0.00688)	0.0270*** (0.00620)	0.0215*** (0.00551)
Acquisition Cycle=2010	0.0597*** (0.00989)	0.0599*** (0.00996)	0.0309*** (0.00975)	0.0235*** (0.00847)
Acquisition Cycle=2008	0.0476*** (0.00987)	0.0479*** (0.00984)	0.0178** (0.00770)	0.0136** (0.00665)
Acquisition Cycle=2006	0.0326*** (0.00667)	0.0329*** (0.00670)	0.0104* (0.00609)	0.00792 (0.00576)
Acquisition Cycle=2004	0.0412*** (0.00458)	0.0414*** (0.00457)	0.0196*** (0.00575)	0.0169*** (0.00465)
Acquisition Cycle=2002	0.0321*** (0.00818)	0.0326*** (0.00819)	0.0115* (0.00663)	0.00907 (0.00579)
Acquisition Cycle=2000	0.0575*** (0.00794)	0.0576*** (0.00796)	0.0266*** (0.00940)	0.0214** (0.00835)
Fixed Effects				
Firm	X		X	
Investor	X		X	
Congressional Cycle	X	X		
Congressional District	X	X		
Firm $\times$ Investor		X		X
Firm $\times$ Congressional District				X
Firm $\times$ Congressional Cycle				X
Investor $\times$ Congressional District				X
Investor $\times$ Congressional Cycle				X
Congressional Cycle $\times$ District			X	X

Notes: *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

Table A.21: Firms' and investors' PAC contributions – One Post Period

This table presents the association between the PAC contributions by firms and their investors' PAC contributions at the congressional cycle–district level during the cycles around a large stock acquisition. The data are, therefore, at the investor–firm–congressional cycle–district level. $\mathbb{1}(\text{Post})$ denotes observations that occur after the acquisition has occurred, but we restrict the post period to only a single cycle (i.e, only one cycle has post taking the value of one). The dependent variable is an indicator variable which denotes that PAC contributions by a firm are greater than zero; $\mathbb{1}(\text{Investor's PAC} > 0)$ is similarly defined. Standard errors (in parenthesis) are double clustered at the firm and investor levels.

Dep. Var.: $\mathbb{1}(\text{Firm's PAC} > 0)$	(1)	(2)	(3)	(4)
$\mathbb{1}(\text{Inv's PAC} > 0) \times \mathbb{1}(\text{Post})$	0.0192*** (0.00403)	0.0193*** (0.00409)	0.0149*** (0.00317)	0.0105*** (0.00260)
$\mathbb{1}(\text{Investor's PAC} > 0)$	0.0547*** (0.00476)	0.0550*** (0.00479)	0.0439*** (0.00372)	0.0425*** (0.00363)
$\mathbb{1}(\text{Post})$	0.000192 (0.000170)	3.04e-05 (0.000183)	0.000273* (0.000162)	-0.000140*** (4.96e-05)
Fixed Effects				
Firm	X		X	
Investor	X		X	
Congressional Cycle	X	X		
Congressional District	X	X		
Firm $\times$ Investor		X		X
Firm $\times$ Congressional District				X
Firm $\times$ Congressional Cycle				X
Investor $\times$ Congressional District				X
Investor $\times$ Congressional Cycle				X
Congressional Cycle $\times$ District			X	X
N	320,702,805	320,702,805	320,702,805	320,678,186
R^2	0.023	0.023	0.035	0.138

Notes: *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

Table A.22: Firms' and investors' PAC contributions – One Post Period Indexers

This table presents the association between the PAC contributions by firms and their investors' PAC contributions at the congressional cycle–district level during the cycles around a large stock acquisition due to index inclusion and using the strict indexer sample as defined in Table 2. The data are, therefore, at the investor–firm–congressional cycle–district level. $\mathbb{1}(\text{Post})$ denotes observations that occur after the acquisition has occurred, but we restrict the post period to only a single cycle (i.e, only one cycle has post taking the value of one). The dependent variable is an indicator variable which denotes that PAC contributions by a firm are greater than zero; $\mathbb{1}(\text{Investor's PAC} > 0)$ is similarly defined. Standard errors (in parenthesis) are double clustered at the firm and investor levels.

Dep. Var.: $\mathbb{1}(\text{Firm's PAC} > 0)$				
	(1)	(2)	(3)	(4)
$\mathbb{1}(\text{Inv's PAC} > 0) \times \mathbb{1}(\text{Post})$	0.0267*** (0.00480)	0.0271*** (0.00471)	0.0122*** (0.00402)	0.00916*** (0.00316)
$\mathbb{1}(\text{Investor's PAC} > 0)$	0.0469*** (0.00462)	0.0470*** (0.00464)	0.0330*** (0.00325)	0.0326*** (0.00299)
$\mathbb{1}(\text{Post})$	-0.000439 (0.000451)	-0.000563 (0.000477)	-0.000178 (0.000441)	-0.000157** (6.82e-05)
Fixed Effects				
Firm	X		X	
Investor	X		X	
Congressional Cycle	X	X		
Congressional District	X	X		
Firm $\times$ Investor		X		X
Firm $\times$ Congressional District				X
Firm $\times$ Congressional Cycle				X
Investor $\times$ Congressional District				X
Investor $\times$ Congressional Cycle				X
Congressional Cycle $\times$ District			X	X
N	36,024,856	36,024,856	36,024,856	36,023,797
R^2	0.026	0.026	0.042	0.128

Notes: *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

Table A.23: Firms' and investors' PAC contributions – Mechanism using the Quasi-Indexer Sample

This table presents the association between the PAC contributions by firms and their investors' PAC contributions at the congressional cycle–district level during the cycles around a large stock acquisition by “indexer” as defined by Bushee (2001) and major events. $\mathbb{1}(\text{Post})$ denotes observations that occur after the acquisition has occurred. The dependent variable is an indicator variable which denotes that PAC contributions by a firm are greater than zero; $\mathbb{1}(\text{Investor's PAC} > 0)$ is similarly defined. $\mathbb{1}(\text{Event})$ takes the value of one in column (1) if the firm received at least one shareholder proposal during a given cycle, in column (2) if it received during a given cycle a shareholder proposal on a topic that had previously received at least 45% support from shareholders, in column (3) if the firm during a given cycle has a management proposal on a topic that historically received at least 20% opposition from shareholders, in column (4) if it had received either a contentious shareholder or a contentious management proposal during a given cycle. $\mathbb{1}(\text{Event})$ takes the value of one in column (5) if it had a non-annual meeting during a given cycle, and in column (6) if the firm experienced a major ESG crisis during a given cycle, zero otherwise. Standard errors are double clustered at the firm and investor level.

Depend. Var.: $\mathbb{1}(\text{PAC}_F > 0)$						
	(1) Event = Any Shrholder. Proposal	(2) Event = Contentious Shrholder.	(3) Event = Contentious Mgmt.	(4) Event = Cont. Shrholder. + Mgmt.	(5) Event = Special Meeting	(6) Event = Major ESG Crisis
$\mathbb{1}(\text{PAC}_I > 0) \times \mathbb{1}(\text{Post}) \times \mathbb{1}(\text{Event})$	0.0169*** (0.00519)	0.0355*** (0.00920)	0.0190*** (0.00405)	0.0203*** (0.00442)	0.000316 (0.00586)	0.0167** (0.00799)
$\mathbb{1}(\text{PAC}_I > 0) \times \mathbb{1}(\text{Post})$	0.00570** (0.00274)	0.0106*** (0.00319)	0.00291 (0.00318)	0.00141 (0.00347)	0.0139*** (0.00352)	0.00220 (0.00190)
$\mathbb{1}(\text{Post}) \times \mathbb{1}(\text{Event})$	-0.0004*** (0.000173)	-0.0009** (0.000401)	-0.0003*** (0.000126)	-0.0004*** (0.000146)	-9.26e-06 (0.000148)	-0.0003** (0.000172)
$\mathbb{1}(\text{PAC}_I > 0) \times \mathbb{1}(\text{Event})$	0.0165*** (0.00329)	0.0118*** (0.00361)	0.00165 (0.00316)	0.00288 (0.00276)	-0.00290 (0.00267)	0.0230*** (0.00685)
$\mathbb{1}(\text{PAC}_I > 0)$	0.0292*** (0.00254)	0.0343*** (0.00284)	0.0340*** (0.00348)	0.0334*** (0.00341)	0.0356*** (0.00287)	0.0354*** (0.00213)
$\mathbb{1}(\text{Post})$	5.86e-05 (7.07e-05)	-9.75e-05** (4.65e-05)	6.68e-05 (7.72e-05)	0.000108 (8.87e-05)	-0.0001*** (5.22e-05)	6.77e-05 (5.02e-05)
$\mathbb{1}(\text{Event})$	- -	- -	- -	- -	- -	- -
Fixed Effects						
Firm $\times$ Investor	X	X	X	X	X	X
Firm $\times$ Congressional District	X	X	X	X	X	X
Firm $\times$ Congressional Cycle	X	X	X	X	X	X
Investor $\times$ Congressional District	X	X	X	X	X	X
Investor $\times$ Congressional Cycle	X	X	X	X	X	X
Congressional Cycle $\times$ District	X	X	X	X	X	X
N	22,663,033	22,663,033	22,663,033	22,663,033	22,663,033	22,659,263
R^2	0.271	0.271	0.271	0.271	0.271	0.304

Notes: *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

Table A.24: Firms' and investors' PAC contributions – Mechanism using the Strict Indexer Sample

This table presents the association between the PAC contributions by firms and their index investors' PAC contributions at the congressional cycle–district level during the cycles around a large stock acquisition and major events. $\mathbb{1}(\text{Post})$ denotes observations that occur after the acquisition has occurred. The dependent variable is an indicator variable which denotes that PAC contributions by a firm are greater than zero; $\mathbb{1}(\text{Investor's PAC} > 0)$ is similarly defined. $\mathbb{1}(\text{Event})$ takes the value of one in column (1) if the firm received at least one shareholder proposal during the given cycle, in column (2) if it received during a given cycle a shareholder proposal on a topic that received previously at least 45% support from shareholders, in column (3) if the firm during a given cycle has a management proposal on a topic that historically received at least 20% opposition from shareholders, and in column (4) if it has received either a contentious shareholder or a contentious management proposal during the given cycle. Furthermore, $\mathbb{1}(\text{Event})$ takes the value of one in column (5) if it has a non-annual meeting during the given cycle, and in column (6) if the firm experiences a major ESG crisis during the specific cycle, zero otherwise. Standard errors are double clustered at the firm and investor level.

Depend. Var.: $\mathbb{1}(\text{PAC}_F > 0)$						
	(1) Event = Any Shrholder. Proposal	(2) Event = Contentious Shrholder.	(3) Event = Contentious Mgmt.	(4) Event = Cont. Shrholder. + Mgmt.	(5) Event = Special Meeting	(6) Event = Major ESG Crisis
$\mathbb{1}(\text{PAC}_I > 0) \times \mathbb{1}(\text{Post}) \times \mathbb{1}(\text{Event})$	0.0142 (0.00903)	0.0159 (0.0163)	0.00976 (0.00631)	0.0119** (0.00569)	0.00562 (0.00877)	0.0177** (0.00782)
$\mathbb{1}(\text{PAC}_I > 0) \times \mathbb{1}(\text{Post})$	0.00295 (0.00422)	0.00623 (0.00484)	0.00105 (0.00612)	-0.000847 (0.00527)	0.00693 (0.00502)	0.000467 (0.00288)
$\mathbb{1}(\text{Post}) \times \mathbb{1}(\text{Event})$	-0.0003* (0.000172)	-0.000424 (0.000273)	-0.000153 (0.000103)	-0.0002** (0.000102)	-0.000122 (0.000164)	-0.0002** (0.000121)
$\mathbb{1}(\text{PAC}_I > 0) \times \mathbb{1}(\text{Event})$	0.0153*** (0.00535)	0.0149 (0.00966)	0.00310 (0.00514)	0.00486 (0.00479)	-0.00285 (0.00652)	0.0109 (0.00693)
$\mathbb{1}(\text{PAC}_I > 0)$	0.0295*** (0.00454)	0.0339*** (0.00468)	0.0333*** (0.00554)	0.0324*** (0.00532)	0.0349*** (0.00477)	0.0352*** (0.00426)
$\mathbb{1}(\text{Post})$	3.92e-05 (7.31e-05)	-8.11e-05 (6.64e-05)	1.54e-05 (9.87e-05)	5.55e-05 (8.66e-05)	-9.04e-05 (6.96e-05)	-2.33e-05 (5.01e-05)
$\mathbb{1}(\text{Event})$	- -	- -	- -	- -	- -	- -
Fixed Effects						
Firm $\times$ Investor	X	X	X	X	X	X
Firm $\times$ Congressional District	X	X	X	X	X	X
Firm $\times$ Congressional Cycle	X	X	X	X	X	X
Investor $\times$ Congressional District	X	X	X	X	X	X
Investor $\times$ Congressional Cycle	X	X	X	X	X	X
Congressional Cycle $\times$ District	X	X	X	X	X	X
N	7,302,091	7,302,091	7,302,091	7,302,091	7,302,091	7,532,292
R^2	0.267	0.267	0.267	0.267	0.267	0.299

Notes: *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

Table A.25: Firms' PAC contributions and weighted investor PAC contributions - Active and Passive Ownership

This table presents the association between the PAC contributions by firms and the weighted sum of their investors' PAC contributions at the congressional cycle – congressional candidate level. The data are, therefore, at the firm – congressional cycle – congressional district level. The dependent variable is an indicator variable which denotes that PAC contributions by a firm are greater than zero to a given district during a particular cycle. $\mathbb{1}(\text{Weighted sum of investor PAC} > 0)$ takes the value of one if the total weighted contribution of all investors with a stake in the firm is positive. This total is calculated by multiplying each investor's ownership percentage by their contribution to the district during the cycle, and then summing these values across all investors to obtain a firm – cycle level measure. This is done separately for active versus passive investors to construct two independent variables. Standard errors are clustered at the firm level.

Dep. Var.: $\mathbb{1}(\text{Firm's PAC} > 0)$					
	(1)	(2)	(3)	(4)	(5)
$\mathbb{1}(\text{Weighted sum of active investor PAC} > 0)$	0.0184*** (0.000358)	0.0139*** (0.000332)	0.0159*** (0.000334)	0.0147*** (0.000315)	0.0116*** (0.000475)
$\mathbb{1}(\text{Weighted sum of passive investor PAC} > 0)$	0.0199*** (0.000581)	0.0169*** (0.000558)	0.0209*** (0.000596)	0.0189*** (0.000584)	0.0186*** (0.000695)
Fixed Effects					
Firm	X				
Congressional Cycle	X	X			
Congressional District			X		
Firm $\times$ Congressional District		X		X	X
Firm $\times$ Congressional Cycle			X	X	X
Congressional Cycle $\times$ District					X
N	5,870,095	5,707,837	5,870,095	5,707,837	5,707,837
R^2	0.022	0.206	0.031	0.211	0.219

Notes: *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

Table A.26: Firms' and investors' PAC contributions – Granular Investor Types

This table presents the association between the PAC contributions by firms and their investors' PAC contributions at the congressional cycle–district level during the cycles around a large stock acquisition using the investor classification breakdowns of Bushee (2001). Column 1, for instance, only includes the cases where the given institutional investor is an investment company or investment advisor. $\mathbb{1}(\text{Post})$ denotes observations that occur after the acquisition has occurred. The dependent variable is an indicator variable which denotes that PAC contributions by a firm are greater than zero; $\mathbb{1}(\text{Investor's PAC} > 0)$ is similarly defined. *Investment Advisors & Companies* include asset management firms labeled as investment advisors and companies, such as hedge funds, *Bank Trusts* only include bank trusts, *Insurance Companies* only include asset management firms that belong to insurance companies, and *Corporate Pensions* include asset management firms belonging to corporate pensions. The last column includes asset management firms owned by public pensions, endowments, and other asset management firms labeled as “miscellaneous”. Standard errors (in parenthesis) are double clustered at the firm and investor levels.

82

Dep. Var.: $\mathbb{1}(\text{Firm's PAC} > 0)$					
	(1) <i>Investment Advisors & Companies</i>	(2) <i>Bank Trusts</i>	(3) <i>Insurance Companies</i>	(4) <i>Corporate Pensions</i>	(5) <i>Endowments, Public Pensions, Others</i>
$\mathbb{1}(\text{Inv's PAC} > 0) \times \mathbb{1}(\text{Post})$	0.0206*** (0.00284)	0.00906* (0.00467)	0.00684* (0.00358)	0.0245*** (0.00464)	0.0149 (0.0175)
$\mathbb{1}(\text{Investor's PAC} > 0)$	0.0339*** (0.00234)	0.0436*** (0.00574)	0.0364*** (0.00241)	0.0412*** (0.00322)	0.0523*** (0.00909)
$\mathbb{1}(\text{Post})$	-0.000142*** (4.43e-05)	-0.000462 (0.000299)	-0.000400 (0.000241)	-0.00341*** (0.000828)	-5.54e-05 (6.22e-05)
Fixed Effects					
Firm $\times$ Investor	X	X	X	X	X
Firm $\times$ Congressional District	X	X	X	X	X
Firm $\times$ Congressional Cycle	X	X	X	X	X
Investor $\times$ Congressional District	X	X	X	X	X
Investor $\times$ Congressional Cycle	X	X	X	X	X
Congressional Cycle $\times$ District	X	X	X	X	X
<i>N</i>	256,349,670	37,644,254	11,503,499	1,868,518	20,106,278
<i>R</i> ²	0.128	0.163	0.177	0.194	0.125

Notes: *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

Table A.27: Firms' and index investors' PAC contributions – Index investor types by partisanship

This table presents the association between the PAC contributions by firms and their index investors' PAC contributions at the congressional cycle–district level during the cycles around a large stock acquisition using a variety of ownership breakdowns and using the strict indexer sample as defined in Table 2. The data are, therefore, at the investor–firm–congressional cycle–district level. Columns 1 and 2 break down the sample by above versus below median skew where skew is defined as the absolute value of Republican giving share minus 0.5. $\mathbb{1}(\text{Post})$ denotes observations that occur after the acquisition has occurred. The dependent variable is an indicator variable which denotes that PAC contributions by a firm are greater than zero; $\mathbb{1}(\text{Investor's PAC} > 0)$ is similarly defined. The mean of the dependent variable of columns 1 and 2 are 0.012 and 0.018, respectively. Standard errors (in parenthesis) are double clustered at the firm and investor levels.

Dep. Var.: $\mathbb{1}(\text{Firm's PAC} > 0)$		
	(1) <i>More Partisan</i>	(2) <i>Less Partisan</i>
$\mathbb{1}(\text{Inv's PAC} > 0) \times \mathbb{1}(\text{Post})$	0.0179*** (0.00530)	0.00993*** (0.00187)
$\mathbb{1}(\text{Investor's PAC} > 0)$	0.0378*** (0.00179)	0.0355*** (0.00293)
$\mathbb{1}(\text{Post})$	-0.00133*** (0.000420)	-0.00123*** (0.000346)
Fixed Effects		
Firm $\times$ Investor	X	X
Firm $\times$ Congressional District	X	X
Firm $\times$ Congressional Cycle	X	X
Investor $\times$ Congressional District	X	X
Investor $\times$ Congressional Cycle	X	X
Congressional Cycle $\times$ District	X	X
N	5,953,168	24,699,058
R^2	0.196	0.174

Notes: *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

Table A.28: Firms' PAC giving and index investors' employee giving

This table presents the association between the PAC contributions by firms and their investors' employee contributions at the congressional cycle–district level during the cycles around a large stock acquisition, starting from 1990. The data are, therefore, at the investor–firm–congressional cycle–district level. $\mathbb{1}(\text{Post})$ denotes observations that occur after the acquisition has occurred. The dependent variable is an indicator variable which denotes that PAC contributions by a firm are greater than zero; $\mathbb{1}(\text{Investor's PAC} > 0)$ is similarly defined; $\mathbb{1}(\text{Ind. Giving} > 0)$ is an indicator variable which denotes that the individual political contributions by the investor's employees are greater than zero. The definitions of indexer sample constructions used here is the same as that described in the notes for Table 2. Standard errors are double clustered at the firm and investor level.

Dep. Var.: $\mathbb{1}(\text{Firm's PAC} > 0)$								
	Quasi-Indexer Sample				Strict Indexer Sample			
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
$\mathbb{1}(\text{Inv's PAC} > 0) \times \mathbb{1}(\text{Post})$	0.0307*** (0.00744)	0.0319*** (0.00749)	0.0146*** (0.00337)	0.0118*** (0.00296)	0.0365*** (0.00514)	0.0371*** (0.00506)	0.0140*** (0.00330)	0.0118*** (0.00282)
$\mathbb{1}(\text{Investor's PAC} > 0)$	0.0531*** (0.00462)	0.0531*** (0.00466)	0.0407*** (0.00333)	0.0399*** (0.00304)	0.0474*** (0.00441)	0.0473*** (0.00440)	0.0331*** (0.00297)	0.0330*** (0.00269)
$\mathbb{1}(\text{Indv. Giving} > 0) \times \mathbb{1}(\text{Post})$	0.00186 (0.00124)	0.00245* (0.00130)	0.00118** (0.000483)	0.000706* (0.000388)	0.00479** (0.00211)	0.00526** (0.00219)	0.00387*** (0.00102)	0.00181** (0.000804)
$\mathbb{1}(\text{Ind. Giving} > 0)$	0.00377*** (0.000728)	0.00353*** (0.000722)	0.000761* (0.000444)	0.000540 (0.000339)	0.00378*** (0.000763)	0.00362*** (0.000746)	0.000564 (0.000517)	0.000485 (0.000423)
$\mathbb{1}(\text{Post})$	-.0007*** (0.000232)	-.0009*** (0.000265)	-.0003** (0.000178)	-.0002*** (7.94e-05)	-.001** (0.000546)	-.001** (0.000581)	-.0007 (0.000496)	-.0003*** (0.000106)
Fixed Effects								
Firm	X		X		X		X	
Investor	X		X		X		X	
Congressional Cycle	X	X			X	X		
Congressional District	X	X			X	X		
Firm $\times$ Investor		X		X		X		X
Firm $\times$ Congressional District				X				X
Firm $\times$ Congressional Cycle				X				X
Investor $\times$ Congressional District				X				X
Investor $\times$ Congressional Cycle				X				X
Congressional Cycle $\times$ District			X	X			X	X
<i>N</i>	113,120,631	113,120,631	113,120,631	113,095,577	28,728,639	28,728,639	28,728,639	28,722,078
<i>R</i> ²	0.032	0.033	0.048	0.167	0.031	0.031	0.050	0.146

Notes: *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

Table A.29: Firms' and investors' PAC contributions (Levels)

This table presents the association between the PAC contributions by firms and their investors' PAC contributions at the congressional cycle–district level during the cycles around a large stock acquisition. The data are, therefore, at the investor–firm–congressional cycle–district level. $\mathbb{1}(\text{Post})$ denotes observations that occur after the acquisition has occurred. The dependent variable is the total dollar amount of PAC contributions the given firm gave to the incumbent in a given district during a given cycle; the independent variable is the total dollar amount of PAC contributions the given investor gave to the same politician during the same congressional cycle. The mean of the dependent variable is 21.43. Standard errors are double clustered at the firm and investor levels.

Depend. Var.: Firm's Giving				
	(1)	(2)	(3)	(4)
Investor's Giving $\times \mathbb{1}(\text{Post})$	0.0278*** (0.00286)	0.0282*** (0.00291)	0.0143*** (0.00282)	0.0127*** (0.00211)
Investor's Giving	0.0622*** (0.00267)	0.0627*** (0.00270)	0.0486*** (0.00265)	0.0475*** (0.00218)
$\mathbb{1}(\text{Post})$	1.665*** (0.211)	1.478*** (0.230)	2.404*** (0.209)	-0.449*** (0.0754)
Fixed Effects				
Firm	X		X	
Investor	X		X	
Congressional Cycle	X	X		
Congressional District	X	X		
Firm $\times$ Investor		X		X
Firm $\times$ Congressional District				X
Firm $\times$ Congressional Cycle				X
Investor $\times$ Congressional District				X
Investor $\times$ Congressional Cycle				X
Congressional Cycle $\times$ District			X	X
<i>N</i>	339,785,165	339,785,165	339,785,165	339,764,091
<i>R</i> ²	0.022	0.023	0.040	0.126

Notes: *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

Table A.30: Firms' and index investors' PAC contributions (Levels)

This table presents the association between the PAC contributions by firms and their index investors' PAC contributions at the congressional cycle–district level during the cycles around a large stock acquisition using either the quasi-indexer or strict indexer sample as defined in Table 2. The data are, therefore, at the investor–firm–congressional cycle–district level. $\mathbb{1}(\text{Post})$ denotes observations that occur after the acquisition has occurred. The dependent variable is the total dollar amount of PAC contributions the given firm gave to the incumbent in a given district during a given cycle; the independent variable is the total dollar amount of PAC contributions the given investor gave to the same politician during the same congressional cycle. The mean of the dependent variable in columns 1 to 4 is 24.35 and the mean in columns 5 to 8 is 27.88. Standard errors are double clustered at the firm and investor levels.

Depend. Var.: Firm's Giving								
	Quasi-Indexer Sample				Strict Indexer Sample			
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Investor's Giving $\times \mathbb{1}(\text{Post})$	0.0303*** (0.0101)	0.0309*** (0.0102)	0.0132*** (0.00489)	0.0114*** (0.00397)	0.0345*** (0.00500)	0.0350*** (0.00503)	0.0146*** (0.00468)	0.0123*** (0.00391)
Investor's Giving	0.0608*** (0.00584)	0.0611*** (0.00586)	0.0459*** (0.00414)	0.0451*** (0.00392)	0.0526*** (0.00385)	0.0526*** (0.00386)	0.0365*** (0.00380)	0.0366*** (0.00362)
$\mathbb{1}(\text{Post})$	0.632 (0.838)	0.318 (0.955)	1.563** (0.766)	-0.574** (0.245)	0.857 (0.977)	0.743 (1.026)	2.187** (0.975)	-0.615*** (0.195)
Fixed Effects								
Firm	X		X		X		X	
Investor	X		X		X		X	
Congressional Cycle	X	X			X	X		
Congressional District	X	X			X	X		
Firm $\times$ Investor		X		X		X		X
Firm $\times$ Congressional District				X				X
Firm $\times$ Congressional Cycle				X				X
Investor $\times$ Congressional District				X				X
Investor $\times$ Congressional Cycle				X				X
Congressional Cycle $\times$ District			X	X			X	X
<i>N</i>	168,155,771	168,155,771	168,155,771	168,138,702	38,356,758	38,356,758	38,356,758	38,355,867
<i>R</i> ²	0.027	0.027	0.046	0.136	0.024	0.024	0.046	0.125

Notes: *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

Table A.31: Firms' and investors' PAC contributions — Divestments (Levels)

This table presents the association between the PAC contributions by firms and their investors' PAC contributions at the congressional cycle–district level during the cycles around a large stock divestments. The data are, therefore, at the investor–firm–congressional cycle–district level. $\mathbb{1}(\text{Post})$ denotes observations that occur after the divestments has occurred. The dependent variable is the total dollar amount of PAC contributions the given firm gave to the incumbent in a given district during a given cycle; the independent variable is the total dollar amount of PAC contributions the given investor gave to the same politician during the same congressional cycle. The mean of the outcome variable is 51.9. Standard errors are double clustered at the firm and investor levels.

Depend. Var.: Firm's Giving				
	(1)	(2)	(3)	(4)
Investor's Giving $\times \mathbb{1}(\text{Post})$	-0.064*** (0.0209)	-0.065*** (0.0209)	-0.062*** (0.0203)	-0.054*** (0.0171)
Investor's Giving	0.208*** (0.0236)	0.210*** (0.0235)	0.186*** (0.0214)	0.175*** (0.0187)
$\mathbb{1}(\text{Post})$	10.41*** (2.394)	11.46*** (2.656)	10.33*** (2.325)	4.951 (3.697)
Fixed Effects				
Firm	X		X	
Investor	X		X	
Congressional Cycle	X	X		
Congressional District	X	X		
Firm $\times$ Investor		X		X
Firm $\times$ Congressional District				X
Firm $\times$ Congressional Cycle				X
Investor $\times$ Congressional District				X
Investor $\times$ Congressional Cycle				X
Congressional Cycle $\times$ District			X	X
N	104,258,141	104,258,141	104,258,141	104,225,090
R^2	0.054	0.055	0.069	0.212

Notes: *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

Table A.32: Firms' and investors' PAC contributions – Shareholder proposals and ESG incidents (Levels)

This table presents the association between the PAC contributions by firms and their investors' PAC contributions at the congressional cycle–district level during the cycles around a large stock acquisition and major events. $\mathbb{1}(\text{Post})$ denotes observations that occur after the acquisition has occurred. The dependent variable is the dollar amount of PAC contributions by a firm to a given district at a given cycle; PAC_I is similarly defined. $\mathbb{1}(\text{Event})$ takes the value of one in column (1) if the firm received at least one shareholder proposal during the given cycle, in column (2) if it received during a given cycle a shareholder proposal on a topic that received previously at least 45% support from shareholders, in column (3) if the firm during a given cycle has a management proposal on a topic that historically received at least 20% opposition from shareholders, and in column (4) if it has received either a contentious shareholder or a contentious management proposal during the given cycle. Furthermore, $\mathbb{1}(\text{Event})$ takes the value of one in column (5) if it has a non-annual meeting during the given cycle, and in column (6) if the firm experiences a major ESG crisis during the specific cycle, zero otherwise. Standard errors are double clustered at the firm and investor level.

Depend. Var.: Firm's Giving						
	(1)	(2)	(3)	(4)	(5)	(6)
	Event = Any Shrholder. Proposal	Event = Contentious Shrholder.	Event = Contentious Mgmt.	Event = Cont. Shrholder. + Mgmt.	Event = Special Meeting	Event = Major ESG Crisis
$\text{PAC}_I \times \mathbb{1}(\text{Post}) \times \mathbb{1}(\text{Event})$	0.0253*** (0.00883)	0.0594*** (0.0207)	0.0190*** (0.00565)	0.0226*** (0.00642)	0.00894 (0.00769)	0.0254*** (0.00917)
$\text{PAC}_I \times \mathbb{1}(\text{Post})$	0.00374 (0.00259)	0.00931*** (0.00340)	0.00274 (0.00340)	-0.000257 (0.00344)	0.0130*** (0.00445)	0.000915 (0.00227)
$\mathbb{1}(\text{Post}) \times \mathbb{1}(\text{Event})$	-1.533*** (0.536)	-3.769** (1.522)	-0.901*** (0.330)	-1.173*** (0.386)	-0.332 (0.452)	-1.241*** (0.443)
$\text{PAC}_I \times \mathbb{1}(\text{Event})$	0.0133*** (0.00494)	0.0112* (0.00595)	0.00288 (0.00399)	0.00523 (0.00406)	-0.00759 (0.00469)	0.0134** (0.00673)
PAC_I	0.0359*** (0.00351)	0.0399*** (0.00328)	0.0393*** (0.00363)	0.0381*** (0.00373)	0.0417*** (0.00333)	0.0455*** (0.00349)
$\mathbb{1}(\text{Post})$	0.251 (0.172)	-0.124 (0.0983)	0.224 (0.188)	0.411* (0.215)	-0.327*** (0.121)	0.239* (0.138)
$\mathbb{1}(\text{Event})$	- -	- -	- -	- -	- -	- -
Fixed Effects						
Firm $\times$ Investor	X	X	X	X	X	X
Firm $\times$ Congressional District	X	X	X	X	X	X
Firm $\times$ Congressional Cycle	X	X	X	X	X	X
Investor $\times$ Congressional District	X	X	X	X	X	X
Investor $\times$ Congressional Cycle	X	X	X	X	X	X
Congressional Cycle $\times$ District	X	X	X	X	X	X
N	41,958,893	41,958,893	41,958,893	41,958,893	41,958,893	41,599,866
R^2	0.270	0.270	0.270	0.270	0.270	0.288

Notes: *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

Table A.33: Firms' and investors' PAC contributions – Investor Types (Levels)

This table presents the association between the PAC contributions by firms and their investors' PAC contributions at the congressional cycle–district level during the cycles around a large stock acquisition using a variety of ownership breakdowns. The data are, therefore, at the investor–firm–congressional cycle–district level. Columns 1 and 2 break down the sample by funds that are privately owned versus publicly owned, respectively. Columns 3 and 4 split active investors by above versus below median skew where skew is defined as the absolute value of Republican giving share minus 0.5. Column 5 contains only firms and hedge fund investor pairs where the acquisition takes place around the given hedge fund investor's activism event targeting the acquired firm using data provided by Alon Brav. $\mathbb{1}(\text{Post})$ denotes observations that occur after the acquisition has occurred. The dependent variable is an the dollar amount of PAC contributions by a firm to a particular district at a given time; *Investor's Giving* is similarly defined. Standard errors (in parenthesis) are double clustered at the firm and investor level.

Depend. Var.: Firm's Giving					
	(1) <i>Private Funds</i>	(2) <i>Public Funds</i>	(3) <i>More Partisan</i>	(4) <i>Less Partisan</i>	(5) <i>Hedge Fund Activism</i>
Investor's Giving $\times \mathbb{1}(\text{Post})$	0.0258*** (0.00230)	0.00731** (0.00335)	0.0183*** (0.00565)	0.0103*** (0.00221)	0.0373*** (0.000878)
Investor's Giving	0.0416*** (0.00326)	0.0440*** (0.00375)	0.0423*** (0.00214)	0.0393*** (0.00312)	0.0220*** (0.000859)
$\mathbb{1}(\text{Post})$	-0.272*** (0.0854)	-0.802* (0.478)	-2.108*** (0.567)	-2.971*** (0.949)	- -
Fixed Effects					
Firm $\times$ Investor	X	X	X	X	X
Firm $\times$ Congressional District	X	X	X	X	X
Firm $\times$ Congressional Cycle	X	X	X	X	X
Investor $\times$ Congressional District	X	X	X	X	X
Investor $\times$ Congressional Cycle	X	X	X	X	X
Congressional Cycle $\times$ District	X	X	X	X	X
<i>N</i>	267,366,099	72,387,795	8,848,871	28,695,878	947,226
<i>R</i> ²	0.114	0.155	0.163	0.186	0.119

Notes: *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

Table A.34: Firms' PAC giving and institutional investors' employee giving (Levels)

This table presents the association between the PAC contributions by firms and their investors' employee contributions at the congressional cycle–district level during the cycles around a large stock acquisition, starting from 1990. The data are, therefore, at the investor–firm–congressional cycle–district level. $\mathbb{1}(\text{Post})$ denotes observations that occur after the acquisition has occurred. The dependent variable is the total dollar amount of PAC contributions the given firm gave to the incumbent in a given district during a given cycle; the independent variable is the total dollar amount of individual contributions the given investor's employees gave to the same politician during the same congressional cycle. Standard errors are double clustered at the firm and investor level.

Depend. Var.: Firm's Giving				
	(1)	(2)	(3)	(4)
Investor's Giving $\times \mathbb{1}(\text{Post})$	0.0279*** (0.00756)	0.0286*** (0.00774)	0.0146*** (0.00403)	0.0127*** (0.00310)
Investor's Giving	0.0602*** (0.00469)	0.0605*** (0.00474)	0.0478*** (0.00346)	0.0462*** (0.00311)
Indv. Giving $\times \mathbb{1}(\text{Post})$	0.00338 (0.00209)	0.00365* (0.00210)	0.00175 (0.00119)	0.00190* (0.00107)
Indv. Giving	0.00443*** (0.000795)	0.00415*** (0.000768)	0.00229*** (0.000457)	0.000984*** (0.000379)
$\mathbb{1}(\text{Post})$	1.258* (0.657)	1.110 (0.770)	1.983*** (0.591)	-0.473*** (0.154)
Fixed Effects				
Firm	X		X	
Investor	X		X	
Congressional Cycle	X	X		
Congressional District	X	X		
Firm $\times$ Investor		X		X
Firm $\times$ Congressional District				X
Firm $\times$ Congressional Cycle				X
Investor $\times$ Congressional District				X
Investor $\times$ Congressional Cycle				X
Congressional Cycle $\times$ District			X	X
<i>N</i>	227,592,651	227,592,651	227,592,651	227,549,396
<i>R</i> ²	0.025	0.026	0.042	0.152

Notes: *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

Table A.35: Firms' and investors' PAC contributions – Board of directors connection (Levels)

This table presents the association between the PAC contributions by firms and their investors' PAC contributions at the congressional cycle–district level during cycles around an establishment of a board of directors connection. The data are, therefore, at the investor–firm–congressional cycle–district level. $\mathbb{1}(\text{Board})$ denotes observations that occur after the board connection is established (an employee working for the given institutional investor has a seat on the board). The dependent variable is the total dollar amount of PAC contributions the given firm gave to the incumbent in a given district during a given cycle; the independent variable is the total dollar amount of PAC contributions the given investor gave to the same politician during the same congressional cycle. Standard errors (in parentheses) are clustered at the firm and investor level.

Depend. Var.: Firm's Giving				
	(1)	(2)	(3)	(4)
Investor's Giving $\times \mathbb{1}(\text{Post}) \times \mathbb{1}(\text{Board})$	0.0761*** (0.0222)	0.0808*** (0.0241)	0.0832*** (0.0230)	0.0600*** (0.0176)
Investor's Giving $\times \mathbb{1}(\text{Post})$	0.0245*** (0.00779)	0.0248*** (0.00790)	0.0107** (0.00422)	0.0102*** (0.00346)
Investor's Giving	0.0623*** (0.00516)	0.0627*** (0.00519)	0.0487*** (0.00386)	0.0476*** (0.00366)
$\mathbb{1}(\text{Board})$	-3.668** (1.865)	- -	-3.855** (1.923)	- -
$\mathbb{1}(\text{Post})$	1.653** (0.696)	1.464* (0.781)	2.391*** (0.635)	-0.457*** (0.162)
Fixed Effects				
Firm	X		X	
Investor	X		X	
Congressional Cycle	X	X		
Congressional District	X	X		
Firm $\times$ Investor		X		X
Firm $\times$ Congressional District				X
Firm $\times$ Congressional Cycle				X
Investor $\times$ Congressional District				X
Investor $\times$ Congressional Cycle				X
Congressional Cycle $\times$ District			X	X
N	339,785,165	339,785,165	339,785,165	339,764,091
R^2	0.022	0.023	0.040	0.126

Notes: *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

Table A.36: Firms' PAC contributions and weighted investor PAC contributions (Levels)

This table presents the association between the PAC contributions by firms and the weighted sum of their investors' PAC contributions at the congressional cycle – congressional candidate level. The data are, therefore, at the firm – congressional cycle – congressional district level. The dependent variable is the amount of PAC contributions by a firm to a given district during a particular cycle. The weighted sum of investor PAC is the total weighted contribution of all investors with a stake in the firm. This total is calculated by multiplying each investor's ownership percentage by their contribution to the district during the cycle, and then summing these values across all investors to obtain a firm – cycle level measure. The mean of the dependent variable is 28.01. Standard errors are clustered at the firm level.

Dep. Var.: Firm's PAC					
	(1)	(2)	(3)	(4)	(5)
Weighted sum of investor PAC	0.169*** (0.00971)	0.137*** (0.00657)	0.138*** (0.00906)	0.143*** (0.00668)	0.0499*** (0.00731)
Fixed Effects					
Firm	X				
Congressional Cycle	X	X			
Congressional District			X		
Firm × Congressional District		X		X	X
Firm × Congressional Cycle			X	X	X
Congressional Cycle × District					X
<i>N</i>	5,870,095	5,707,837	5,870,095	5,707,837	5,707,837
<i>R</i> ²	0.009	0.182	0.017	0.186	0.193

Notes: *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

Table A.37: Firms' PAC contributions and weighted PAC contributions by indexers (Levels, Index investors only)

This table presents the association between the PAC contributions by firms and the weighted sum of their index investors' PAC contributions at the congressional cycle – congressional district level using the strict indexer sample as defined in Table 2. The data are, therefore, at the firm – congressional cycle – congressional district level. The outcome variable is the amount of PAC contributions by a firm to a given district during a particular cycle. The weighted sum of indexer PAC is the total weighted contribution of all indexer investors with a stake in the firm. This total is calculated by multiplying each indexer investor's ownership percentage by their contribution to the district during the cycle, and then summing these values across all investors to obtain a firm – cycle level measure. The mean of the dependent variable is 27.52. Standard errors are clustered at the firm level.

Dep. Var.: Firm's PAC					
	(1)	(2)	(3)	(4)	(5)
Weighted sum of indexer PAC	0.162*** (0.0217)	0.132*** (0.0111)	0.126*** (0.0205)	0.139*** (0.0116)	0.0453*** (0.0121)
Fixed Effects					
Firm	X				
Congressional Cycle	X	X			
Congressional District			X		
Firm × Congressional District		X		X	X
Firm × Congressional Cycle			X	X	X
Congressional Cycle × District					X
<i>N</i>	2,293,991	2,277,987	2,293,991	2,277,987	2,277,987
<i>R</i> ²	0.007	0.145	0.015	0.149	0.159

Notes: *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

Table A.38: Firms' PAC contributions and weighted investor PAC contributions - Active and Passive Ownership (Levels)

This table presents the association between the PAC contributions by firms and the weighted sum of their investors' PAC contributions at the congressional cycle – congressional candidate level. The data are, therefore, at the firm – congressional cycle – congressional district level. The outcome variable is the amount of PAC contributions by a firm to a given district during a particular cycle. The weighted sum of indexer PAC is the total weighted contribution of all indexer investors with a stake in the firm. This total is calculated by multiplying each indexer investor's ownership percentage by their contribution to the district during the cycle, and then summing these values across all investors to obtain a firm – cycle level measure. This is done separately for active and passive investors to construct two independent variables. The mean of the dependent variable is 28.01. Standard errors are clustered at the firm level.

Dep. Var.: Firm's PAC>0					
	(1)	(2)	(3)	(4)	(5)
Weighted sum of active investor PAC	0.203*** (0.0192)	0.160*** (0.0131)	0.168*** (0.0168)	0.168*** (0.0132)	0.0399*** (0.0144)
Weighted sum of passive investor PAC	0.156*** (0.0168)	0.127*** (0.00944)	0.127*** (0.0155)	0.132*** (0.00975)	0.0515*** (0.00960)
Fixed Effects					
Firm	X				
Congressional Cycle	X	X			
Congressional District			X		
Firm × Congressional District		X		X	X
Firm × Congressional Cycle			X	X	X
Congressional Cycle × District					X
<i>N</i>	5,870,095	5,707,837	5,870,095	5,707,837	5,707,837
<i>R</i> ²	0.009	0.181	0.017	0.186	0.193

Notes: *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

Table A.39: Firms' and investors' lobbying expenditure (Levels)

This table presents the association between the lobbying expenditure by firms and their investors' lobbying expenditure at the congressional cycle – issue level during the cycles around a large stock acquisition. The data are, therefore, at the investor – firm – congressional cycle – issue level. $\mathbb{1}(\text{Post})$ denotes observations that occur after the acquisition has occurred. The dependent variable is the total dollar amount of PAC contributions the given firm gave to the incumbent in a given district during a given cycle; the independent variable is the total dollar amount of PAC contributions the given investor gave to the same politician during the same congressional cycle. The mean of the dependent variable is 8,146. Standard errors (in parenthesis) are double clustered at the firm and investor levels.

Dep. Var.: $\text{Lobby}_{\text{Firm}} > 0$				
	(1)	(2)	(3)	(4)
$\text{Lobby}_{\text{Investor}} > 0 \times \mathbb{1}(\text{Post})$	0.0421*** (0.0144)	0.0428*** (0.0146)	0.0319** (0.0127)	0.0321** (0.0125)
$\text{Lobby}_{\text{Investor}} > 0$	0.00708 (0.00631)	0.00669 (0.00643)	0.00196 (0.00488)	0.00158 (0.00489)
$\mathbb{1}(\text{Post})$	-533.5* (309.6)	-746.6* (438.7)	-484.0 (305.2)	-154.7*** (57.10)
Fixed Effects				
Firm	X		X	
Investor	X		X	
Congressional Cycle	X	X		
Lobby Issue	X	X		
Firm $\times$ Investor		X		X
Firm $\times$ Lobby Issue				X
Firm $\times$ Congressional Cycle				X
Investor $\times$ Lobby Issue				X
Investor $\times$ Congressional Cycle				X
Congressional Cycle $\times$ Lobby Issue			X	X
N	40,376,357	40,376,357	40,376,357	40,376,357
R^2	0.102	0.104	0.107	0.128

Notes: *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

A.9 Appendix Figures

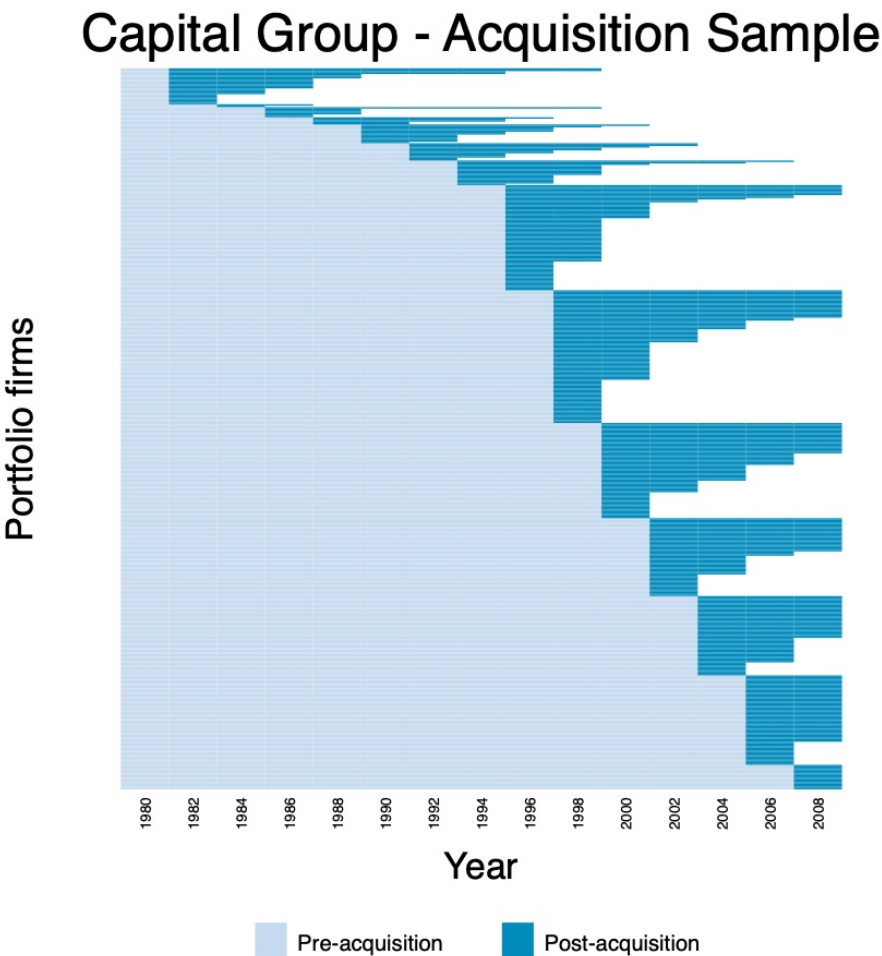


Figure A.1: Visualization of $\mathbb{1}(\text{Post})$ indicator for acquisition sample

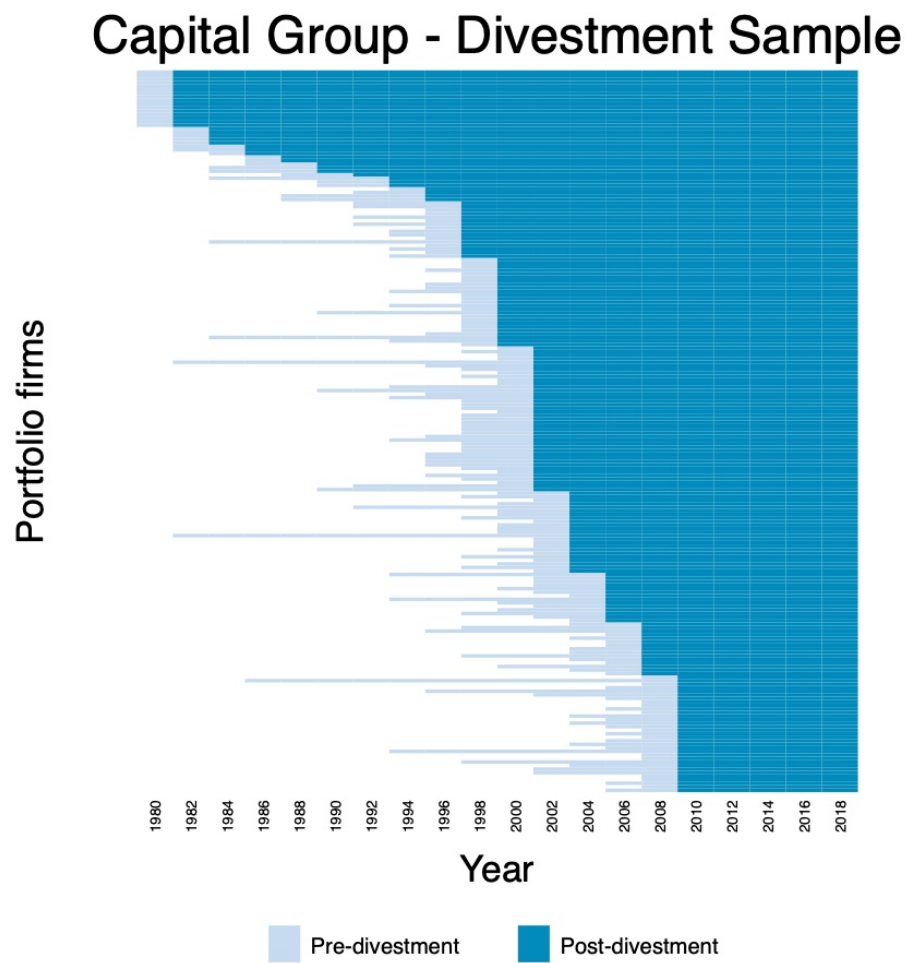


Figure A.2: Visualization of $1(\text{Post})$ indicator for divestment sample

Figure A.3: Distribution of coefficients by dropping largest asset managers

