Political Capital: Corporate Connections and Stock Investments in the U.S. Congress, 2004-2008[1]

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A large political science literature has examined how political exchanges between legislators and firms are reflected in campaign contributions, corporate lobbying, and corporate directorships. In this paper we extend this literature by studying the equity holdings of members of Congress. We synthesize existing theories of political exchange to derive a set of testable predictions about how political relationships between legislators and firms shape legislators' portfolio decisions and performance. Using data from the 2004–2008 period, we show that members of Congress disproportionately hold stock in local companies and campaign contributors; we also show that their investments in these firms outperform the rest of their portfolios. Members' investments in local companies are their most lucrative, beating the market by about 3% annually, with even higher returns for investments in local companies that also contribute to the member or lobby her committees. The findings are consistent with the view that politicians choose their investments partly to solidify political relationships with firms and partly to capitalize on information they learn in the course of interacting with firms.

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I. Introduction

A large literature in political science has examined the relationship between legislators and corporate interests, mostly focusing on how firms use lobbying and campaign contributions to influence politicians' beliefs or actions.[2] Another literature looks at the problem of exchange between politicians and firms from the politician's perspective, asking how legislators' voting behavior or constituency service can attract campaign contributions and lobbying resources from firms.[3] Still other research has examined how political exchange provides economic benefits to firms[4] and, more recently, politicians.[5]

In this study we bring these threads of research together by asking what legislators' financial investments can tell us about political exchange between politicians and firms. In particular, we seek to understand not just whether members of Congress financially benefit from investing in companies to which they are politically connected, but also whether members accomplish political goals through their financial portfolios. We focus on common stocks because, in contrast to other assets such as bonds, real estate, or mutual funds, stock investments establish a direct ownership connection between legislators and public companies. Together with a companion paper focused on overall performance (Eggers and Hainmueller; 2011), our work provides the most comprehensive empirical study of politicians' investments to date.

Our analysis in this paper synthesizes existing theories of political exchange to derive a set of testable predictions about how political relationships between legislators and firms shape legislators' portfolio decisions and performance. We begin with the observation that politicians and firms seek mutually beneficial political exchange, but that it is difficult to sustain this exchange because contracts are not enforceable and both parties have inherent incentives to renege (Kroszner and Stratmann; 1998). We then note that the problems of

[2]Denzau and Munger (1986); Hall and Wayman (1990); Wright (1990); Austen-Smith (1996); Hansen and Mitchell (2000); Esterling (2007); Baumgartner et al. (2009).

[3]See, for example, Box-Steffensmeier and Grant (1999) and Kroszner and Stratmann (2005a).

[4]Roberts (1990); Fisman (2001); Johnson and Mitton (2003); Khwaja and Mian (2005); Faccio (2006); Jayachandran (2006); Goldman et al. (2009, 2008); Ferguson and Voth (2008).

[5]Diermeier et al. (2005); Bò et al. (2006); Eggers and Hainmueller (2009); Lenz and Lim (2010); Querubin and Snyder (2011); Bhavnani (2011).

political exchange can be alleviated in some circumstances if the politician owns stock in the firm. Most directly, buying equity in a company tends to align the politician's policy preferences with those of the firm, which in turn makes the firm more likely to trust the member to pursue the firm's interest. A politician may also buy stock in a company in order to signal information about his or her policy preferences, which firms can use to identify politicians who are sympathetic to their goals. In some cases, therefore, politicians may invest in firms in search of political dividends rather than financial rewards. At the same time, political exchange can involve a transfer of market-relevant information that may help politicians to achieve superior investment returns: for example, information about a firm's prospects that a politician learns when he meets with the firm's lobbyists.

These theoretical considerations generate testable predictions about members' portfolio allocation and performance. First, because investments facilitate political exchange and connections lead to information exchange, we expect to see a significant political "skew" in members' portfolios, in the sense that members should be more likely to invest in companies to which they are politically connected – companies in their home districts, companies that provide them with campaign contributions, and companies in industries regulated by their committees. Second, because investments made to achieve political ends should perform less well than those made on financial grounds alone, we expect the financial returns of members' investments in companies to which they are politically connected to be larger when there are fewer obstacles to political exchange. In particular, we expect that members' investments in home-district companies should perform better than investments in other connected firms or their portfolio overall. This is because members' interests are closely aligned with local companies even in the absence of equity investments; without significant obstacles to political exchange with these firms, members investing in local companies face less of a tension between their political and financial goals.

We test these predictions using a newly-collected dataset that reconstructs the daily stock portfolios of the 422 members of the House and Senate who reported owning U.S. stocks in financial disclosures forms filed between 2004 and 2008. Consistent with the idea

that investments both facilitate and benefit from political connections, we find a strong political skew in members' portfolio investments. Members invest about 13 times more money in a company if it is located in their district (or state, for senators) than otherwise, controlling for member and company fixed effects. A similar "local bias" has been found for other types of investors, but the magnitude of the bias we find among members of Congress is around twice as large as that found for individual investors (Ivković and Weisbenner; 2005) and over 10 times as large as that found for mutual fund managers (Coval and Moskowitz; 1999). Moreover, members of Congress invest about 4 times as much in a company if its PAC contributes to their election campaigns than otherwise, controlling for whether the company is headquartered in the member's district (and member and company fixed effects). We find no such skew towards companies that lobbied legislation that was referred to committees on which a member sits.

Our analysis also confirms our second prediction, which is that members' investments in connected firms perform better when agency problems are less substantial. Consistent with the idea that members learn valuable information in the course of political interactions with firms, we find suggestive evidence that members' investments in companies from which they received PAC donations slightly outperform their other investments, as do their investments in companies regulated by the committees on which they sit. The performance of these connected portfolios is soundly beaten, however, by the portfolio of investments that members make in companies headquartered in their home districts. Not only do members' local investments beat their non-local investments, their local investments also outperform the overall market by almost 3% per year– a return that would please any mutual fund manager. The returns are even higher when the local company also contributes money to the member or lobbies legislation before her committees. Our finding that members handsomely beat the market with local stocks is robust to various specifications and is all the more striking considering that recent studies have found that neither individual investors (Seasholes and Zhu; 2010) nor mutual fund managers (Coval and Moskowitz; 2001) enjoy a performance premium on their local investments.[6] In our view, the fact that members'

[6]Coval and Moskowitz (2001) find a local advantage before 1985 but not since.

investments in connected companies (local firms, contributors, and firms their committees regulate) outperform their non-connected investments indicates that members financially benefit from information they gather as a result of their political interactions with firms; the much stronger performance of their local investments compared to their other connected investments is consistent with the view that politicians invest in connected firms in part for political (rather than financial) ends, and that their investments with local firms are less encumbered by these political considerations because of the natural interest alignment between members and the firms in their districts.

We provide further evidence to suggest that the robust performance of members' local investments is based on general knowledge of local companies and the environment in which they operate, rather than time-sensitive knowledge about e.g. earnings announcements or political events. In particular, we show that local trades do not seem to have been better timed than trades in non-local stocks, based on the performance of traded stocks during various periods (one day, two weeks, and five weeks) following the trade. Moreover, we show that members' abnormal returns on local stocks are similar in high-visibility companies that are widely covered by financial analysts and low-visibility companies where locally-informed investors would be expected to have an advantage relative to the market. Finally, we show that the superior local performance does not vary with the political power of the member, which suggests that the local advantage is not driven by members' ability to win policy victories for their portfolio companies. These additional tests suggest that members' superior local performance is not based on stock tips or systematic corrupt or illegal behavior, but rather results from general but not-widely-shared knowledge about the quality of the management of local companies or the types of projects in which they are engaged, which members acquire by virtue of their extensive interactions with local firms.

While our finding that members of Congress benefit from investing in firms to which they are politically connected would seem to confirm widespread suspicions of unethical and profitable "insider trading" in Congress,our analysis in fact provides something of a corrective to that view. The perception that members of Congress unethically profit from

their political positions by trading on political knowledge has been fueled by two studies claiming to find systematically good timing in trades made by members of the Senate (Ziobrowski et al.; 2004) and House (Ziobrowski et al.; 2011), as well as a very recent book compiling anecdotes of well-timed trades made by politically powerful members of Congress (Schweizer; 2011). We find that members of Congress beat the market when they invest in local companies, but we find no evidence that this performance is based on the use of either time-sensitive information or political power. We also find suggestive evidence that members' investments in contributors and regulated companies do slightly better than their non-connected investments, but these connected investments do not outperform the market: in both cases, members would be just as well off investing in an index fund. Most importantly, the overall performance of members' investments is poor (some 2-3% below the market per year in the period we study), suggesting that the widespread view of politicians unethically profiting from their political knowledge has been greatly exaggerated (an issue that we investigate more thoroughly in a companion paper, Eggers and Hainmueller (2011)).

Taken together our findings present a nuanced view of how politicians' equity investments relate to their interactions with firms. Members place considerably larger investments in companies with which they carry out political exchanges. These connected investments generally perform better than their non-connected investments, which indicates that members benefit from information they receive through political interactions with firms. But members' investments in local firms perform far better than their other connected investments, which is consistent with the idea that politicians face political constraints as well as financial opportunities when they invest in the stock market.

II. Political Exchange and Politicians' Investments

In this paper, we investigate the investment portfolios of members of Congress in order to learn about the nature of exchange between politicians and firms. We think of political exchange in this setting as a process by which politicians exert effort on behalf of firms in exchange for political support – e.g. votes, campaign contributions, or lobbying subsidies (Hall and Deardorff; 2006). In principle, any firm could be engaged in political

exchange with any politician, even if there is no record of the politician having publicly given help to the firm or the firm publicly providing a campaign contribution or endorsement.[7] Still, we expect a politician's exchanges to be concentrated in firms to which she has a clearly identifiable link through her constituency (i.e. firms headquartered in her constituency), her campaign contribution receipts (i.e. firms whose PACs contribute to her election campaigns), and through her legislative activities (i.e. firms that are regulated by the committees on which she sits). We describe in detail how we measure these links below. In this section we synthesize existing theories about political exchange and build a set of hypotheses from these theories about how much members of Congress will invest in firms to which they are politically connected and how well those investments will perform.[8] In subsequent sections we test those hypotheses on an extensive, newly-collected dataset on members' equity holdings and member-firm connections.

A. Theory

We make three theoretical claims about political exchange and equity investments that we later use to develop hypotheses about the investments of members of Congress.

First, politicians and firms want to engage in political exchange but they face difficulties in doing so. In many cases, firms would like to give politicians cash or campaign contributions in exchange for policy favors, but such an exchange is considered bribery and is thus not enforceable (McCarty and Rothenberg; 1996; Kroszner and Stratmann; 1998, 2005b). Even if a bribery contract could be written, it would remain incomplete, in the

[7]Lobbying regulations do not require a corporate lobbyist to disclose which member he assisted, nor do current campaign spending regulations make clear which politician benefited from corporate donations to charities or political advocacy organizations.

[8]Readers may wonder about the extent to which members of Congress direct their own investments. There is no way to know from the financial disclosure forms the extent to which a particular member directed his or her own investment decisions. We do know that the members of Congress whose investments we analyze chose to give themselves the option to be involved in managing their portfolios, in the sense that they chose not to put their investments in qualified blind trusts. (Only about 20 members used a blind trust in the period we examine.) Even if they delegate day-to-day decisions to a money manager (as is almost certainly the case with several members whose portfolios show very active trading strategies), by foregoing a blind trust they have reserved the right to direct portfolio decisions. We thus speculate that a large majority of members had at least some input into the management of their portfolio and many were solely responsible.

sense that it would be costly or impossible to enumerate all of the possible "states of the world" and the behavior expected of the politician in each state (Hart and Moore; 1988). Even if an adequate contract could be written, the complexity of the legislative process and the difficulty of verifying the politician's efforts means that there would be a moral hazard problem between the principal (the firm) and its agent (the politician). For these reasons, politicians and firms can be expected to search for devices by which to make mutually-beneficial exchanges possible. Snyder (1992) and Stratmann (1998) have focused on the role of repeated campaign contributions and the threat of ending the relationship as a way in which a contributor can ensure that a politician will honor her promises; Kroszner and Stratmann (1998) has described the organization of standing committees in Congress as an institutional device that both members and interest groups would desire as a way to make repeat play more likely and thus sustain mutually beneficial exchange.

Our second theoretical claim is that, for some pairings of a politician and a firm, the problems of political exchange can be reduced or resolved by the politician taking an ownership stake in the firm. We focus on two main mechanisms by which buying stock could help a politician convince a firm to undertake or continue political exchange. First, equity holdings could help to align the politician's policy preferences with those of the firm and thus make the firm more willing to trust that the politician will pursue the firm's interests. The firm and the politician face a classic moral hazard problem, familiar from employment contracts: the firm wants to hire the politician to pursue its legislative goals, but the politician has an incentive to shirk and devote her resources to other priorities, such as other legislative issues, electoral campaigning, or leisure. If the firm and the politician are engaged in repeated interactions and the politician's output is sufficiently observable, it may be possible to sustain cooperation on the basis of the firm's threat to discontinue making payments (i.e. campaign contributions) if the politician shirks (Kroszner and Stratmann; 1998). If not (e.g. if the politician is likely to retire or leave office, or if the legislative process is sufficiently inscrutable), then it may be that no profitable exchange is possible: the firm is not able to offer an incentive-compatible reward and punishment strategy that

will prevent the politician from shirking. In the face of this agency problem, a politician who buys stock can reduce the divergence between her incentives and the firm's interests, with the result that campaign contributions may be sufficient to sustain cooperation. Such investments by politicians in politically-connected firms should be seen as analogous to equity compensation plans for corporate managers, which are widely used to reduce moral hazard problems that result from the divergence between the goals of a firm's equity owners and its salaried managers (Jensen and Meckling; 1976; Hölmstrom; 1979). Firms cannot pay politicians in the form of stock, nor can they require politicians to hold equity (as is common with corporate directors), but they can seek to initiate exchange with politicians whose incentives are already aligned by stock ownership and break off exchange with politicians who divest.

The second mechanism by which buying stock could help a politician convince a firm to carry on political exchange is signaling: stock holdings may act as a signaling device through which politicians communicate information about their preferences. In principal-agent problems like the one faced by a firm looking to hire a politician, the "ally principle" says that the firm generally does best when it can find a politician whose preferences are most closely aligned with its own (Bendor and Meirowitz; 2004). Members' investments holdings (which are publicly divulged) may give them an opportunity to convey a costly signal about their policy preferences or ideology that a firm could use to identify members who are most sympathetic to its goals. If a tobacco firm is unsure which politicians it should ask to advance its legislative agenda, for example, it may be able to draw valuable inferences by looking at which members own tobacco stocks; members who are willing to own stock in tobacco companies may be the most likely to stand up for tobacco interests in Congress, if other politicians are unwilling to do so because of the public criticism it might invite.[9] The signaling value of stock ownership thus comes not from the effect it has on the member's incentives but from the information it conveys about the member's type.

[9]More technically, if the cost of publicly supporting tobacco companies is unobserved but varies across members, there may be a separating equilibrium where only those members who can publicly support tobacco companies at the lowest cost will own the stock.

Our third theoretical claim is that political exchange involves an exchange of information that could be valuable to an investor. A firm that works with a politician to advance its legislative goals shares information about both the firm and its environment that may not be fully incorporated into equity markets. A politician who interacts with a firm in her district or a firm that is seeking policy assistance may get a sense of the competence of senior management, the growth potential of products under development, or the nature of the firm's competitive threats that would be difficult for an equity researcher to obtain. In addition, a politician working with a firm may learn about regulatory developments or legislative initiatives affecting that firm before the market does. As evidence that the kind of information a politician learns through political exchange may be valuable, a $100 million-a-year "political intelligence" industry has developed in Washington, DC in which hedge fund managers pay to talk to political insiders.[10] Recent research on the social networks of mutual fund managers (Cohen et al.; 2008) also suggests that direct personal connections to corporate managers (of the kind that politicians enjoy thanks to rich networks in their districts and regular fundraising events) can provide channels for the flow of valuable information.

B. Hypotheses

The foregoing discussion of agency problems and information flows in political exchange suggests a pair of hypotheses about how much members invest in companies to which they are politically connected and how well those investments perform.

First, we can expect that politicians would invest disproportionately in companies with which they have or might seek a political connection. If stock ownership can in fact overcome some exchange problems, we might expect members of Congress to be disproportionately invested in companies whose PACs contribute to their campaigns because investing in those companies could be a strategy for perpetuating the exchange of campaign contributions for political favors. Equally, if politicians acquire valuable information by interacting

[10]Brody Mullins And Susan Pulliam, "Hedge Funds Pay Top Dollar for Washington Intelligence," *The Wall Street Journal*, October 4, 2011.

with firms politically, we might expect members of Congress to attempt to take advantage of that information by disproportionately investing in local firms, contributors, and firms that lobby the member's committees. Tahoun (2011) has independently found that members disproportionately invest in contributing companies,[11] but to our knowledge no one has tested whether members disproportionately invest in local firms or firms connected to the member through lobbying relationships. The hypothesis we will test therefore is that, conditional on firm and member characteristics, *members will make bigger bets on companies to which they have a political connection* (measured by whether the firm is headquartered in their district, contributes to their re-election campaign, or lobbies legislation referred to their committees) *than on other companies.*

Second, we can expect that the financial return on subsets of a member's portfolio will be increasing in the degree of information exchanged and decreasing in the degree of agency problems involved in the exchange. If agency problems were not an issue but political connections to a company did impart valuable information, members would invest in companies to which they are politically connected simply because they know more about these companies; to the extent that this information is valuable, we would expect these investments to perform well relative to the rest of their portfolios. If on the other hand members did not learn anything valuable from their political connections to firms but agency problems did hinder political exchange, members would invest in companies to which they are or hope to be politically connected in order to sustain political exchange; to the extent that these investments are made for political reasons rather than financial ones, we would not expect them to perform well. These contradictory predictions suggest that for some types of holdings, such as investments that a member makes in firms that contribute to her campaign, it is difficult to say *a priori* whether we should expect the holdings to perform well; it would depend on whether the information benefit of political exchange outweighs the handicap of investing for political returns, which is hard to judge

[11]He only uses stock holdings on the subset of S&P 500 firms. We consider all common stock holdings and also stock transactions to reconstruct actual stock portfolios which allows us to consider both the allocation and performance of stock investments.

in general. We do have a clearer expectation for local investments, however. Because stock purchases are less likely to be used to resolve agency problems when a member deals with local companies, we expect that *members' local investments will perform better than their other connected investments*: local investments benefit from all of the information advantages of political exchange with fewer non-financial constraints.

Why do we believe that members will not use stock holdings to cement relationships with local firms? We identify three reasons. First, members and local companies expect to have a high-stakes repeated relationship, with local firms having the ability to punish a shirking representative by withdrawing not just contributions but also votes and local influence. In repeated interaction of this kind, where the available punishments are severe enough to make the agent want to continue cooperating, there is likely to be no reason for the agent to further align incentives by purchasing equity in the principal. Second, local firms are likely to know their representative well, both from extensive interactions while she is in office but also probably from an extensive local political or business career; the resulting lower uncertainty about the politician's type means that buying stock is likely to communicate little if any information about her preferences. Third, the incentives of the member and a local firm are already closely aligned because a member of Congress is expected to represent the interests of local business and is held electorally accountable on that basis. As a result, for the politician to buy the firm's stock would be superfluous as a means of aligning incentives, because the firm is probably already persuaded that the politician wants to help the firm, and it would also be uninformative as a signal of the politician's type, because buying the firm's stock is not a costly signal if all representatives are expected to support the firms in their districts. For each of these reasons, we expect that the desire to cement political relationships is likely to play a much smaller role in shaping members' local portfolios than in shaping their investments in non-local firms. We therefore expect that members' local investments will benefit from the information advantages of political exchange without being hampered by political considerations, and that as a result the members' investments in local companies will outperform their other

connected investments as well as their portfolios overall.

III. Data

Our data on politicians' equity portfolios comes from annual financial disclosure forms submitted between 2004 and 2008 by members of Congress and transcribed by the Center for Responsive Politics. The disclosure forms report each member's year-end holdings of common stocks as well as a list of transactions executed throughout the year. We first matched each reported holding and transaction to companies traded on three U.S. exchanges (NYSE, AMEX, and Nasdaq); overall the dataset includes 29,778 reported end-of-year holdings and 48,309 reported transactions in a total of 2,581 companies that together make up about 94% of the total capitalization of the three exchanges over our sample period. We then reconstructed each member's daily holdings by combining the year-end holdings and transactions and carrying out a daily portfolio reweighting to account for market fluctuations. In this way we were able to reproduce dollar value holdings on each day between January 1, 2004 and December 31, 2008 for all 422 members of Congress reporting stock holdings.[12]

Table 1 provides summary statistics describing the stock portfolios appearing in our dataset. For each member, we calculate the value and number of holdings and transactions in each year and then average across years to get member-level averages. As indicated in the left panel of Table 1, member portfolio sizes range from $501 (for a member who reported a single stock in the lowest value band) to $140 million, the average reported by Jane Harman.[13] The distribution of stock holdings is strongly skewed: the median member on average holds stocks worth about $93,000 in 5 stocks, while the average member holds about $1.7 million in 19 stocks. The right panel of Table 1 indicates that the distribution

[12]Our data collection process is described in more detail in a companion paper (Eggers and Hainmueller; 2011) that focuses on the overall returns of the equity portfolios of members of Congress.

[13]The performance of Jane Harman's portfolio was unusually poor, largely due to a $50+ million position in Harman Industries that dropped about 1/3 in value in January of 2008 after the release of a discouraging forecast. Because of the large size of her portfolio and the consequent large downward influence of her performance on aggregate excess returns, we exclude her from subsequent analyses unless otherwise noted. Including Harman not surprisingly has little effect on estimates of the performance of the average member but yield lower estimated performance when we weight by portfolio size.

of annual transactions across members is also quite right-skewed: the average member buys and sells 18 and 22 stocks per year (respectively), worth about $402,000 and $619,000; the median member buys and sells 2 and 3 stocks worth about $17,000 and $40,000.

To examine the relationship between political connections and investing behavior in Congress, we define three types of connections between politicians and companies that capture important channels by which members and firms may interact.

The first connection measures whether a member is connected to a company because the company is headquartered in the member's home district. This connection is important because members often interact with companies from their home districts in various ways. Local companies may ask their representative for policy favors and members may approach local firms to solicit political support. To measure this connection, we obtained the location of each company's headquarters from Compustat and assigned this address to a congressional district;[14] this allows us to label whether each stock holding involved a company in the owner's constituency. For senators, an investment is considered in-district if the company is headquartered in the senator's state.

The second connection measure draws upon the literature on campaign contributions. Specially, we consider whether a member is connected to a company because its PAC provided campaign donations to the member. We collected PAC contribution data between 2003 and 2008 from the FEC[15] and linked PACs to companies and their contributions to members (289,694 reports totalling $466.5 million). This allows us to record, for each stock holding, how much the company contributed to the owner's election campaigns.

The third connection measure draws upon the literature on lobbying. In particular, we used the lobbying disclosure database provided by the Center for Responsive Politics (CRP) to link companies to members according to the extent to which each company lobbied on legislation appearing before committees on which each member sits. In particular, for each lobbying disclosure form filed between 2003 and 2008 on behalf of a company in our dataset (238,040 reports totaling $18.2 billion), we assessed whether any bills were mentioned under

[14]We used an API provided by `GovTrack.us`.

[15]Via `watchdog.net`.

"Specific Lobbying Issues" (as processed by CRP) and then distributed the value of the lobbying reported in that disclosure form among committees to which named bills were referred;[16] this gives us a measure of how closely linked the company's lobbying priorities are to the owner's committee responsibilities.[17]

The average member has about 6% of his investments (by value) in local firms, 15% in contributors, and 49% in companies that lobby legislation before his committees.

IV. Do Members place larger bets in politically connected companies?

In this section we test whether, as hypothesized above, members of Congress place larger investments in companies with which they are likely to carry out political exchanges. To assess members' portfolio choices, we examine the weight that a member puts on a company in his portfolio as a function of the connections he has with the company.[18] In particular, we estimate a regression of the form

$$w_{ij} = \beta_0 + \beta_1 District_{ij} + \beta_2 Contributions_{ij} + \beta_3 Lobbying_{ij} + \alpha_i + \alpha_j + \varepsilon_{ij}$$

[16]For example, if a report disclosing $50,000 of lobbying expenditure by Halliburton mentioned one bill that was referred to the Agriculture Committee $50,000 would be added to the total lobbying connection between Halliburton and every member who sits on the Agriculture Committee; if the same report mentioned two bills, one of which was referred to Agriculture and another of which was referred to Energy, then $25,000 would be added to the total lobbying connection between Halliburton and every member who sits on the Agriculture Committee, and another $25,000 would be added to the total lobbying connection between Halliburton and every member who sits on the Energy Committee.

[17]In this approach we thus use bill referrals rather than statutory jurisdictions to define committee policy areas (King; 1994), and we use bill lobbying rather than industrial classifications to determine which policy areas companies view as important to them. We considered an alternative coding based on a mapping between industries and committees based on the committees' stated jurisdictions, extending Myers (2007)'s mapping of House committees to two-digit SIC codes. (The approach of linking committees to industries through jurisdictions has previously been used by Munger (1989); Endersby and Munger (1992)). However, the industry classifications are far too coarse in some instances, making many companies appear connected to members when they are not, and in other cases clear connections are overlooked. For example, Northrop Grumman, a major defense contractor, falls under SIC code 38, "Instruments and Related Products," along with photographic equipment companies like Kodak, Fuji, and Canon and a host of medical device companies. According to Myers' mapping, this industry comes under the jurisdiction of the armed services committee, but not the defense subcommittee of the appropriations committees. The problems with using statutory committee assignments were noted by King (1994). In our view the lobbying/bill-referral approach gives a more accurate representation of which members had a special role in shaping legislation that mattered to companies.

[18]See Cohen et al. (2008) for another example of this kind of analysis.

where w_{ij} is the weight in basis points of company j in member i's portfolio (averaged across years for which we have the member's portfolio), $District_{ij}$ is an indicator variable that takes the value 1 if the company is headquartered in the member's district and 0 otherwise, $Contributions_{ij}$ is an indicator variable that takes the value 1 if the company's PAC contributed to the member in the period 2003-2008 and 0 otherwise, $Lobbying_{ij}$ is an indicator that takes the value 1 if the company lobbied legislation before the member's committee and 0 otherwise, and α_i and α_j are member and company fixed effects. The member and company fixed effects are included to difference out unobserved heterogeneity; the model is identified based on within-member and within-company variation and we can rule out the possibility that the results are driven by unobserved factors that vary across members and or firms.

Table 2 presents the results, where model 1 reports the coefficients from the regression described above; the other models include interactions and assess other definitions of connectedness as robustness checks. We find a very strong skew in members' portfolios towards firms to which those members are politically connected. The average portfolio weight in the data is 3.88 basis points, meaning .0388 percent of the total portfolio. Model 1 indicates that the average portfolio weight is more than 13 times higher when the company is headquartered in the member's district and about 3.5 times higher if the company has contributed to the member's election campaigns. The estimates for the lobbying connection are zero. Regression (2) includes a full battery of indicators for each possible combination of the three connections (the reference category is companies that are not connected through any of these connections). The estimates of the average portfolio weights (with their .95 confidence intervals) are visualized in Figure 1. The average weight is about 11 times higher for companies that are connected to members by district only, about 12 times higher for companies connected by district and lobbying, and 42 times higher for companies that are connected by all three.

How robust are these findings? The models in columns 3-5 extend the analysis by using different measures that consider the strength of the contributions and lobbying connection.

Column 3 uses binary measures that are coded as 1 if the company's contributions or lobbying exceeded the median amount among a member's connected companies. Column 4 uses measures that capture the relative strength of the connections as the company's share of all contributions or lobbying expenditures directed to the member or his committees. Column 5 includes an interaction term between these strength measures and the in-district dummy. The results from these alternative measures confirm the results from the main models (1 & 2). In fact, the magnitude of the political skew towards contributors increases with the strength of the connection. Model 3 indicates that the average portfolio weight is more than 5.5 times higher when the company is above the median among a member's PAC contributors. Model 4 indicates that a one percentage point increase in the relative share of a company's contributions to a member is associated with a 5 basis point increase in its portfolio weight on average. Model 5 reveals that this skew towards more important contributors is even stronger when the company is headquartered in a member's home district; for such firms a one percentage point increase in relative share of a company's contributions to a member is associated with a 24 basis point increase in its portfolio weight on average.

As another robustness check, Table A.1 in the appendix replicates the entire analysis conditioning only on stocks that members actively choose to hold (following Cohen et al. (2008)). The results are very similar and clearly demonstrate that even comparing only among the stocks that members choose to actively hold, they place much larger bets on politically connected companies. For example, compared to an average weight of 279 basis points, they place an additional 274 basis points on home district firms and an additional 45 basis points on firms that provide campaign contributions on average. The overweighting is similarly increasing in the strength and combinations of the connections.

Given this robustness to alternative definitions, conditional and unconditional tests, and because all of these regressions include member and firm fixed effects, we are confident that these findings reflect the association of member-firm connections and portfolio decisions, rather than simply a correlation between member or firm characteristics and our measures

of member-firm connections. Taken together these results suggest that members do in fact place considerably larger bets in companies to which they are politically connected, which is consistent with the idea that members make portfolio choices in part to facilitate political exchanges and in part to financially benefit from them.

V. Political Connections and Portfolio Performance

As discussed above, it is reasonable to expect that politicians would both benefit from the information flows involved in political exchange and be hampered by political considerations that might influence their investments in firms to which they are politically connected. We have argued that these counteracting forces imply a pattern in the portfolio returns that members might enjoy from investing in connected firms. In particular, we argue that stock ownership is unlikely to increase the possibilities for political exchange with local companies, since the incentives of a member and firms in her district are already highly aligned and repeat play is very likely. When members invest in local firms, therefore, they can do so on the basis of the information advantages they enjoy from close interactions with those firms. When members invest in firms that make PAC contributions to their campaigns, on the other hand, the informational advantages of political exchange are tempered by political considerations: a member may choose to hold a particular company's stock in order to maintain a flow of political benefits from that firm rather than to maximize financial returns. We now turn to test the hypothesis that members' local investments outperform their other connected investments.

A. Methods

In order to evaluate the performance of connected and unconnected congressional investments, we need to establish a performance benchmark for the portfolio returns. We follow the standard approach in the empirical finance literature and compare the portfolio returns of congressional investments in connected and unconnected companies to the risk adjusted

market return.[19] In particular, we adopt the standard calendar-time approach (e.g. Barber and Odean (2000)) of regressing risk-adjusted member returns on a set of controls including the return on a market index. Following Hoechle et al. (2009) and Seasholes and Zhu (2010) we carry out our main analysis via a panel regression that estimates the average monthly excess return across members and time, conditional on the standard controls.

In particular, we aggregate each member's daily portfolio returns to the monthly level and then fit the widely-used Carhart Four-Factor model (an extension of the Fama-French Three-Factor model) given by

$$R_{i,t} - R_t^f = \alpha + \beta_1\big(R_t^m - R_t^f\big) + \beta_2 \mathrm{SMB}_t + \beta_3 \mathrm{HML}_t + \beta_4 \mathrm{MOM}_t + \epsilon_{i,t}$$

where $R_{i,t}$ is the return on the portfolio of member i in month t, R_t^m is the return on a market index, R_t^f is the "risk-free rate" or return on U.S. Treasury Bills, and the other controls are passive portfolios noted in the empirical finance literature for diverging from the overall market.[20] The key quantity of interest is the intercept α in this panel regression, which is our estimate of the monthly average abnormal portfolio return across members. In order to account for the cross-sectional correlation in portfolio returns we compute Rogers standard errors clustered by month (see Seasholes and Zhu (2010)).

For each type of connection, we divide each member's portfolio into two subportfolios, one in which the stocks are connected (e.g., where the company issuing the stock is headquartered in the member's constituency) and one in which the stocks are not connected. We then compute for each member-month the return on the connected portfolio, the return

[19]The risk adjusted return has been widely used to examine the investment performance of mutual funds, hedge fund managers, retail investors, and corporate insiders (Carhart; 1997; Barber and Odean; 2000; Jeng et al.; 2003; Ivković and Weisbenner; 2005; Fung et al.; 2008; Hoechle et al.; 2009; Seasholes and Zhu; 2010). An alternative approach might be to compare a member's portfolio return to the portfolio returns of investors that are somehow similar to members. Following standard practice in financial econometrics, wherever possible we compare the estimated excess return on politicians' investments with the estimated excess return on the portfolios of other types of investors, as reported in published research.

[20]SMB_t is the return on a hedged portfolio that is long in small companies and short in big companies ("small-minus-big"), HML_t is the return on a hedged portfolio that is long in high book-to-market companies and short in low book-to-market companies ("high-minus-low"), and MOM_t (Carhart; 1997) is the return on a hedged portfolio that is long in companies with the best performance in the previous year and short in the companies with the worst performance in the previous year. We obtained each control series and data on the risk-free rate from Kenneth R. French's website at `http://mba.tuck.dartmouth.edu/pages/faculty/ken.french/data_library.html`

on the unconnected portfolio, and the return on a zero cost hedged portfolio that holds the portfolio of connected stocks and sells short the portfolio of unconnected stocks (connected minus unconnected). Finally, we carry out our panel regression on each of the three portfolios.[21] In order to check the robustness of the results we conduct the portfolio splits using each of our measures of constituency, contribution, and committee lobbying, as well as the alternative definitions of lobbying and contributions based on percentile cutoffs and combinations of district and other connections.

B. Performance of Connected Portfolios

The results from our empirical tests are displayed in Table 3. As a simple first benchmark, model 1 presents the overall portfolio return including both connected and unconnected stocks. We find that members on average underperform the market by about .23% per month (see Eggers and Hainmueller (2011) for an extensive analysis of members' overall investment performance). Models 2-25 report the return estimates for investments in connected and unconnected companies, as well as the hedged portfolios, for all eight connections. Figure 2 visualizes the monthly alpha returns for easier interpretation. Strikingly, we find that for all definitions of connections, the connected portfolio outperforms the unconnected portfolio, such that the point estimates for the hedged portfolios (which test the differences between the connected and unconnected portfolio) are all positive. These abnormal returns on the hedged portfolio are modest and slightly short of conventional statistical significance for both the lobbying and contributions connections, with alpha returns of .16 to .18 reported in models (4), (7), (10), and (13). Model (16) reports that the estimated alpha for the local hedged portfolio is a strongly statistically significant .48, indicating that investors could handily beat the market by mimicking members' local investments and shorting their other holdings. The analysis thus provides strong evidence that their investments in local stocks do much better than their non-local investments and suggestive evidence that members' investments in firms to which they are connected through either

[21] See Cohen et al. (2008) for a similar approach to assessing the role of company-investor connections in portfolio performance.

PAC contribution or committee lobbying perform better than their other investments.

Not only do members' investments in local firms do substantially better than their other investments, these investments also do better than the market as a whole. The excess return on members' local portfolios is statistically significant and is estimated at around .24 per month, suggesting an excess return of around 3% per year. As indicated by models (20) through (25) of Table 3, the estimated size of the abnormal returns for local investments is even larger when those local companies also gave contributions or lobbied a member's committees: these doubly-connected portfolios beat the market by almost 5% per year, with annualized returns on the hedged portfolio over 6%. This pattern of returns is consistent with the idea that each of these connections represents a means by which members acquire valuable information about companies. To give a better sense for the magnitude of this local advantage, Figure 3 display the cumulative raw returns for the average member portfolio invested in local and non-local stocks over our period of study. The figure depicts the value over time of $100 invested in the CRSP market index (a passive, value-weighted portfolio of stocks on the NYSE, NASDAQ, and AMEX exchanges) and the average (i.e. equal-weighted aggregate) congressional portfolio in local and non-local stocks.[22] The portfolio of investments in home district companies clearly beats the market over the entire time period: $100 invested in a market index (dotted line) in January of 2004 would be worth about $80 by the end of 2008, whereas invested in the congressional portfolio of local stocks (solid line) would be worth about $97, and invested in the congressional portfolio of non local stocks (dashed line) would be worth about $65. This superior performance of local stocks vis-a-vis the market appears consistent across the entire time period, including the market decline and crash in 2007 and 2008.

Extensive additional analysis confirms that these findings are robust to various alternative specifications and weightings. First, Table A.2 in the appendix shows that the basic findings in Table 3 are robust to applying the Carhart and Four-Factor models to a single

[22]For each month, we compute each member's monthly raw portfolio return for local and non-local holdings and average across members; the figure depicts the compound return on this series of monthly returns.

portfolio that aggregates all congressional investments (rather than using the panel approach described above).[23] Second, for each of the local connections, Figure 4 provides box plots of the distribution of alpha estimates that are computed on a member-by-member basis for each member's connected, unconnected, and hedged portfolios. Clearly, for both the CAPM and the 4-Factor models the average member-specific return on the connected portfolio robustly beats the market, and this premium increases in the two-way connections (the median alpha on the connected portfolios in the 4-factor models are, for example, .48, .66, and .66 for the in-district, in-district and contributions, and in-district and lobbying connection respectively). The fact that the connection premium is seen not just in the pooled regression but in the distribution of member-specific alphas suggests that the abnormal returns we find for local investments are not driven by a few unusual members.

VI. Alternative Explanations

We have advanced the idea that members acquire valuable information through their political connections to firms, and that this information should result in higher portfolio returns for members' connected portfolios. We have also hypothesized that members' investments in non-local companies to which they are politically connected may perform less well, because these investments are more likely to be made for political reasons. We view the findings reported in the previous section, which showed better performance in members' connected portfolios than in their non-connected portfolios (especially for local investments) to be consistent with these hypotheses.

We recognize that other explanations are possible, however, some of which we can test. One explanation for the high local returns we find is that the members in our dataset represent states and districts with above-market performance. Our data includes all 422 members of the House and Senate who report holding U.S. equity between 2004 and 2008, but there were well over 600 members of Congress during this period; it could be that those who report equity holdings disproportionately represent areas with high-performing

[23] As shown in Hoechle et al. (2009) the panel approach for which we report results in Table 3 is numerically identical to the aggregate portfolio approach as long as the panel is balanced; when it is not, the weighting implied by the panel regression is more natural in our view.

companies, such that even if members did not have informational advantages in investing in local companies the sample selection would make it seem as if they did. To test this, we computed returns on a passive portfolio of local stocks that were not chosen by the members in our sample in their respective districts; the average alpha on these local-and-not-chosen stocks is almost exactly zero. The local advantage does not appear to be driven by sample selection, but rather appears to reflect the fact that members are able to pick the high performing companies among the companies in their districts.

Another explanation for the positive performance of members' investments in contributors and companies that lobbied their committees is that politically-active firms were generally more successful in this period; in other words, it might be that the apparent value of investing in a company to which a member is politically connected is not due to that specific connection but rather to the fact that the company is generally politically active. To address this alternative explanation, we conducted the same analysis but defined each member's connected portfolio based not on which companies had contributed to or lobbied that specific member but rather which companies generally did a lot of contributing and lobbying. Table A.3 in the appendix presents the results. We find no difference in the performance of the connected and unconnected portfolios defined in this way, suggesting that the portfolio of investments where the PAC contributed to the member outperforms the unconnected portfolio because of the specific relationship between the member and the firm rather than firm characteristics.

An alternative explanation for members' tendency to overweight local firms is that all investors tend to invest disproportionately in firms that are geographically close to them. Indeed, a similar "local bias" has been found for other types of investors, but the magnitude of the bias we find among members of Congress is around twice as large as that found for individual investors (Ivković and Weisbenner; 2005) and over 10 times as much as that found for mutual fund managers (Coval and Moskowitz; 1999).[24] Further, members of

[24]In Ivković and Weisbenner (2005), "local" means a radius of 250 miles; in Coval and Moskowitz (1999) it means a radius of 100 km (62 miles). The median congressional district has an area of just over 2000 square miles which, if it were a circle, would have a radius of about 25 miles; even considering that in many cases the local area in these papers would be largely ocean, the area we consider is smaller. The stronger

Congress appear to be unique in that neither individual investors (Seasholes and Zhu; 2010) nor mutual fund managers (Coval and Moskowitz; 1999, 2001) appear to earn excess returns from their local holdings, which highlights the importance of members' political positions in accounting for their local investing advantages.

VII. Explaining the Local Investing Advantage of Congress

What explains the advantage members of Congress appear to have in investing in local companies? Broadly, we see three possible channels. First, members may make trades on the basis of non-public time-sensitive information about the firm, such as an upcoming product launch or earnings statement; they might happen to obtain this information in the course of regular interaction with lobbyists or senior management or it might be more deliberately fed to them in return for policy favors. Second, members may make trades on the basis of time-sensitive information about the political and regulatory environment of firms to which they are connected, such as early notice about the results of an FDA trial or the inclusion of an earmark or tax loophole in upcoming legislation. Third, members may gain excess returns for local companies because they protect these firms from regulations, audits, or tax provisions by inserting special clauses in legislation or intimidating potentially problematic bureaucrats. Fourth, members may choose a winning portfolio of local firms based on more diffuse knowledge of these firms' management and industries gleaned from repeated interaction with those firms and long-term engagement with those industries through e.g. committee assignments.

While the local premium we find is likely to be the result of several of these channels, we employ three strategies to attempt to say something about which ones are more important.

First, we examine whether timing of trades appears to have been better for local companies than for non-local companies. In particular, we constructed portfolios based on trades with various holding periods separately for connected and unconnected stocks (e.g. a portfolio constructed by holding each local stock bought by any member for five days after the purchase) and examined whether the returns on these transaction-based portfo-

local bias we find could therefore reflect the fact that our definition of "local" is more restrictive.

lios are better for connected stocks. The results are displayed in Table 4. We use five different holding periods (1 day, 10 days, 25 days, 140 days, and 255 days) and, as in the preceding analysis, compute the results for the average member portfolio. What we find is that the local buy-minus-sell (i.e. hedged) portfolio does well for the 140- and 255-day holding periods (and better than the non-local equivalent, although both point estimates and the difference between them are not significantly different from zero), but there is no evidence of excess returns in shorter windows following the trades. (If anything, the local trades perform worse over the 5-day and 25-day windows.) This suggests that the local premium does not emerge from members' short-term trading savvy (i.e. timing) but rather from their general sense of which local companies to invest in.

Second, we examine whether the local premium was larger for lower-visibility companies, where we might expect the information asymmetry between well-connected politicians and other investors to be largest. We divide the local portfolio into companies that appeared in the S&P 500 at some point during 2004-2008 (our proxy for high visibility) and those that did not, and compare the return on a portfolio of local S&P 500 companies to that of a portfolio of local non-S&P 500 companies.[25] The results, reported in Table 5, fail to indicate a difference between local S&P 500 and local non-S&P 500 portfolios; if anything, the non-S&P 500 local investments do *worse*. The fact that their investments in widely covered locally companies do just as well as their investments in relatively obscure local companies suggests that members are benefiting from local information of a type that Wall Street analysts are not able to systematically uncover and arbitrage away.

Third, we examine whether the local premium is larger for particular types of members. If the excess returns for local companies are driven by the fact that members protect these firms from regulations, audits, or tax provisions, then we would expect the local returns to increase as a function of the political power of the member, since it is easier for such legislators to insert special clauses in legislation, intimidate potentially problematic bureaucrats, or sell their votes to the party leadership in exchange for special favors. In

[25]Ivković and Weisbenner (2005) and Seasholes and Zhu (2010) similarly test whether individual investors excel in investing in local non-S&P 500 companies.

order to capture this idea, Table 6 replicates the baseline model for the returns on holdings of home-district companies while distinguishing between members based on seniority (using three equal sized bins for low, medium, and high seniority) and whether they serve on power committees.[26] Given the smaller sample sizes we caution against drawing too strong conclusions from these subgroup tests, but the results do not support the idea that the local premium is driven by the most powerful members. In fact, if anything the local premium seems to be larger among members who do not serve on power committees and who have low seniority.

Taken together, these additional findings point towards an interpretation of the local premium we find. The fact that members' local trades do not appear to be particularly well timed suggests less need for the concern that members do well on their local investments through systematic corrupt or illegal behavior, such as cashing in on stock tips from constituents seeking policy favors or profiting from knowledge of impending legislation or regulatory events. The fact that their local advantage extends to widely covered companies suggests that it is members' multi-faceted and often-personal interactions with local companies, rather than merely their relative familiarity with obscure firms, that explain their advantage in investing in these companies. Moreover, the finding that the local premium is not concentrated among the most powerful members lessens the concern that members' local advantage reflects financial gains derived from members' ability to politically help firms in their portfolios. Instead, we conjecture that members of Congress are able to make judgments about the quality of senior corporate management and other hard-to-observe characteristics of local companies (and possibly other connected firms) by virtue of their personal and political networks and extensive ongoing political interactions with these firms.

[26] Power committees in the House are defined as Rules, Appropriations, Ways and Means, and Commerce; in the Senate as Appropriations, Finance, and Commerce. Stratifications for seniority, portfolio size, and net worth are based on equally sized bins.

VIII. Conclusion

Previous work has studied what campaign contributions, corporate lobbying, and even corporate directorships can tell us about the nature of exchange between politicians and firms. In this study we extend this literature on legislator-firm interactions by studying the equity holdings of members of Congress, which we argue both enable and reflect political exchanges between politicians and firms. We derived testable predictions about congressional investments from existing theories of political exchange, emphasizing the role of agency problems and information flows. We tested these predictions using a newly collected dataset that recreates the stock portfolios of all members of Congress who reported holding common stocks in the 2004-2008 period. In line with our expectations, we find that, conditional on member and firm fixed effects, members of Congress substantially skew their portfolio allocations towards firms that are headquartered in their home districts and provide them with PAC contributions. We also find that members' investments in politically connected firms outperform their non-connected investments, with investments in local companies performing especially strongly. This pattern is consistent with the idea that members' local portfolios enjoy the information benefits of political proximity without being hindered by members' need to cement political exchanges. Further tests to explore the sources of members' superior local performance suggest that their information advantage emerges from general knowledge about the quality of local firms rather than more nefarious sources (such as stock tipping, trading on political "inside information," or giving preferential political treatment to portfolio companies).

Our work therefore supports the view that politicians' equity investments can in some cases be thought of as attempts to facilitate political exchange with firms. In that sense, we have tried to show that an approach to political exchange that has previously been used to explain politicians' legislative effectiveness (Box-Steffensmeier and Grant; 1999), policy stances (Kroszner and Stratmann; 2005a), and committee assignments (Kroszner and Stratmann; 1998) can also help us understand their investment behavior. The striking finding that politicians would use even their investments to secure political exchange

emphasizes the extent to which legislative politics is characterized by a struggle to strike deals in a difficult environment. We welcome further work using other approaches to assess this role of politicians' financial investments, for example by investigating the timing of campaign contributions and investment decisions (Tahoun; 2011), examining whether our findings for PAC contributions extend to individual contributions by corporate executives, or using more precise measures of politicians' involvement with corporate lobbyists.

To the extent that investments facilitate cooperation between firms and members of Congress, proposed regulations on the investing behavior of members of Congress will affect how exchange happens in Washington. Legislation under active consideration at the time of writing would formalize existing prohibitions against trading on political "insider information;" our analysis suggests that this will not have a systematic impact on investment returns, nor should it affect members' ability to cement political relationships with firms, because we see little evidence of such "insider trading" taking place. Others have suggested improving the timeliness and reliability of members' financial disclosures;[27] while such a reform is intended as a way of reducing the ability of members of Congress to benefit from their political knowledge, it may also increase the utility of investments as devices for cementing political exchange, considering that the current delay in reporting makes it difficult for companies to confirm members' equity positions. Finally, still others have called for members to be required to divest from companies in industries they regulate (Schweizer; 2011) or put all of their investments in blind trusts;[28] these reforms would undercut members' ability to use their investments for political purposes, which would likely result in more reliance on other means of cementing exchange, such as personal relationships and constituency ties.

[27] See, for example, Alan Ziobrowski's testimony before the House Financial Services Committee, July 13, 2009.

[28] "Editorial: stop insider trading in Congress," *Dallas Morning News*, Nov. 20, 2011.

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Tables

Table 1: The common stock holdings and transactions of members of Congress - Annual Averages 2004-2008

	Holdings		Annual Transactions			
			Buys		Sells	
	$ Value	Number	$ Value	Number	$ Value	Number
Min	501	1	0	0	0	0
25th Percentile	26,424	2	0	0	11,010	1
Median	93,827	5	17,656	2	39,636	3
75th Percentile	451,169	21	105,960	9	186,068	11
Max	140,767,979	331	32,253,189	424	47,615,848	479
Mean	1,718,091	19	401,744	18	618,942	22

Note: Summary statistics are annual (aggregated) averages across the 2004-2008 period based on end-of-year financial disclosure reports for 422 members of Congress that report common stocks between 2004 to 2008. Values are reported in bands and imputed based on a log-normal model that was fitted to each value band for the group of members that report exact amounts within each band (see text for details).

Table 2: Portfolio Weights as a Function of Member-Firm Connections

Model	(1)	(2)	(3)	(4)	(5)
Dependent Variable:	Portfolio Weight (bp)				
Mean:	3.88				
In District	51.14	44.33	50.68	51.10	39.29
	(8.48)	(8.71)	(8.47)	(8.43)	(8.63)
Lobbying (Any)	0.09	0.29			
	(0.64)	(0.63)			
Contributions (Any)	12.64	17.15			
	(2.37)	(4.72)			
In District & Lobbying (Any)		36.52			
		(20.15)			
In District & Contributions (Any)		47.25			
		(20.96)			
Lobbying (Any) & Contributions (Any)		9.56			
		(2.61)			
In District & Contributions(Any) & Lobbying (Any)		166.48			
		(46.26)			
Lobbying (> p50)			-0.20		
			(1.29)		
Contributions (> p50)			22.06		
			(4.15)		
Lobbying Strength				-0.01	-0.02
				(0.03)	(0.02)
Contribution Strength				0.05	0.04
				(0.01)	(0.01)
Lobbying Strength · In District					1.38
					(0.98)
Contribution Strength · In District					0.20
					(0.11)
Member Fixed Effects	✓	✓	✓	✓	✓
Firm Fixed Effects	✓	✓	✓	✓	✓
N	1,087,494				

Note: Regression coefficients with standards errors (clustered by members) in parenthesis. The dependent variable is the *portfolio weight*, i.e. the share of holdings of a firm in a member's portfolio (in basis points). Members' portfolios are computed as average holdings over the 2004-2008 period. *In District* is a binary indicator for firms that are connected to a member since they are located in a member's home district. *Lobbying (any)* is a binary indicator for firms that are connected to a member since they lobbied a committee on which the member served. *Contributions (any)* is a binary indicator for firms that are connected to a member since they provided her with campaign contributions. *Lobbying (> p50)* and *Contributions (> p50)* are binary indicators for firms that provided more than the median lobbying or contribution amount for each member. *Lobbying Strength* and *Contribution Strength* measure a firm's share of lobbying or contributions relative to each member's total lobbying or contributions (in basis points). All regressions include a full set of members and firms fixed effects (coefficients not shown here).

Table 3: Abnormal Returns for Stock Investments of Members of Congress in Politically Connected Firms 2004-2008

Model	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
		Lobbying (Any)			Lobbying (> p50)			Contributions (Any)			Contributions (> p50)		
	ALL	CON	UCON	L/S	CON	UCON	L/S	CON	UCON	L/S	CON	UCON	L/S
$R_{m,t} - R_{f,t}$	0.90	0.90	0.94	-0.10	0.88	0.93	-0.10	0.76	0.93	-0.15	0.73	0.92	-0.20
	(0.03)	(0.05)	(0.04)	(0.08)	(0.05)	(0.03)	(0.09)	(0.05)	(0.03)	(0.04)	(0.05)	(0.03)	(0.03)
SMB_t	0.10	-0.08	0.37	-0.40	-0.07	0.27	-0.32	-0.07	0.18	-0.25	-0.05	0.15	-0.18
	(0.05)	(0.06)	(0.06)	(0.08)	(0.07)	(0.05)	(0.08)	(0.09)	(0.05)	(0.07)	(0.09)	(0.05)	(0.08)
HML_t	0.21	0.07	0.26	-0.14	0.07	0.22	-0.16	0.21	0.15	0.12	0.17	0.16	0.06
	(0.05)	(0.06)	(0.06)	(0.08)	(0.06)	(0.05)	(0.08)	(0.07)	(0.05)	(0.05)	(0.07)	(0.05)	(0.06)
MOM_t	-0.18	-0.18	-0.11	-0.08	-0.19	-0.14	-0.08	-0.22	-0.14	-0.15	-0.24	-0.16	-0.18
	(0.04)	(0.04)	(0.04)	(0.05)	(0.04)	(0.04)	(0.04)	(0.05)	(0.04)	(0.04)	(0.04)	(0.04)	(0.04)
Alpha	-0.23	-0.09	-0.29	0.17	-0.08	-0.29	0.17	-0.04	-0.24	0.16	-0.05	-0.25	0.18
	(0.09)	(0.10)	(0.10)	(0.11)	(0.11)	(0.09)	(0.12)	(0.13)	(0.08)	(0.10)	(0.12)	(0.09)	(0.11)
N	18,388	15,779	14,950	12,341	14,820	15,999	12,431	11,529	17,349	10,490	9,700	17,596	8,908
Annualized Alpha	-2.76	-1.08	-3.48	2.04	-0.96	-3.48	2.04	-0.48	-2.88	1.92	-0.6	-3	2.16

Model		(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)	(23)	(24)	(25)
		In District			Lobbying & Contributions			District & Contributions			District & Lobbying		
		CON	UCON	L/S	CON	UCON	L/S	CON	UCON	L/S	CON	UCON	L/S
$R_{m,t} - R_{f,t}$		0.89	0.91	-0.05	0.78	0.92	-0.13	0.92	0.90	-0.08	0.90	0.90	-0.07
		(0.05)	(0.03)	(0.06)	(0.05)	(0.03)	(0.04)	(0.09)	(0.03)	(0.15)	(0.07)	(0.03)	(0.09)
SMB_t		0.28	0.09	0.23	-0.10	0.16	-0.24	0.04	0.10	0.13	0.04	0.10	0.08
		(0.07)	(0.05)	(0.10)	(0.09)	(0.05)	(0.08)	(0.11)	(0.05)	(0.15)	(0.10)	(0.05)	(0.11)
HML_t		0.23	0.19	0.02	0.19	0.16	0.10	0.04	0.21	-0.10	0.15	0.21	0.12
		(0.07)	(0.06)	(0.10)	(0.07)	(0.05)	(0.06)	(0.13)	(0.06)	(0.20)	(0.10)	(0.05)	(0.11)
MOM_t		-0.21	-0.18	-0.05	-0.19	-0.16	-0.11	-0.23	-0.18	-0.14	-0.22	-0.18	-0.19
		(0.06)	(0.04)	(0.06)	(0.05)	(0.04)	(0.04)	(0.07)	(0.04)	(0.08)	(0.05)	(0.04)	(0.06)
Alpha		0.24	-0.23	0.48	-0.05	-0.22	0.09	0.39	-0.24	0.57	0.43	-0.24	0.54
		(0.12)	(0.10)	(0.15)	(0.13)	(0.09)	(0.10)	(0.17)	(0.09)	(0.21)	(0.17)	(0.09)	(0.19)
N		4,607	18,029	4,248	10,840	17,494	9,946	1,826	18,360	1,798	2,152	18,360	2,124
Annualized Alpha		2.88	-2.76	5.76	-0.6	-2.64	1.08	4.68	-2.88	6.84	5.16	-2.88	6.48

Note: Table shows results from analysis using the monthly returns of the holdings-based calendar-time portfolios of all members of Congress that report holding common stocks during the 2004-2008 period. The dependent variable is monthly risk adjusted return of a member's holdings of connected stocks (CON), holdings of unconnected stocks (UCON), or investments in a zero cost portfolio that holds the portfolio of connected stocks and sells short the portfolio of unconnected stocks (L/S). Connections are defined as follows: *In District* connected firms are connected to a member since they are located in a member's home district. *Lobbying (any)* connected firms are connected to a member since they lobbied a committee on which the member served. *Contributions (any)* connected firms are connected to a member since they provided her with campaign contributions. *Lobbying (> p50)* and *Contributions (> p50)* connected firms are connected since they provided more than the median lobbying or contribution amount for each member. Controls are the Fama and French (1993) mimicking portfolios (the market excess return ($R_{m,t} - R_{f,t}$), a zero-investment size portfolio (SMB_t), a zero-investment book-to-market portfolio (HML_t)) and the Carhart (1997) momentum factor (MOM_t). Rogers standard errors (clustered by month) are provided in parenthesis.

Table 4: Abnormal Returns on Transaction-Based Portfolios by Connection and Holding Period

		Average Member Portfolio					
		Connected			Unconnected		
Connection	Holding Period	Buys	Sells	L/S	Buys	Sells	L/S
In District	1 Day	0.229	-0.371	0.315	0.785	1.703	-0.918
		(0.591)	(0.888)	(1.267)	(0.531)	(0.664)	(0.807)
In District	10 Days	-0.344	0.879	-1.120	0.048	0.357	-0.308
		(0.736)	(0.887)	(1.156)	(0.294)	(0.268)	(0.296)
In District	25 Days	0.394	0.798	-0.404	0.227	0.113	0.114
		(0.592)	(0.947)	(1.015)	(0.326)	(0.303)	(0.174)
In District	140 Days	0.090	-0.246	0.336	-0.163	-0.217	0.054
		(0.429)	(0.390)	(0.491)	(0.184)	(0.172)	(0.166)
In District	255 Days	-0.152	-0.148	-0.004	-0.011	-0.153	0.143
		(0.308)	(0.325)	(0.394)	(0.137)	(0.117)	(0.134)
District & Contributions	1 Days	-0.484	-0.209	-0.352	0.811	1.737	-0.925
		(0.717)	(0.411)	(1.077)	(0.529)	(0.655)	(0.799)
District & Contributions	10 Days	-0.187	1.333	-0.705	0.037	0.375	-0.338
		(0.961)	(1.198)	(1.414)	(0.296)	(0.267)	(0.297)
District & Contributions	25 Days	-0.134	0.731	-0.391	0.237	0.181	0.056
		(1.322)	(1.055)	(1.628)	(0.328)	(0.301)	(0.186)
District & Contributions	140 Days	0.184	-0.671	0.924	-0.166	-0.203	0.037
		(0.705)	(0.644)	(0.779)	(0.182)	(0.168)	(0.165)
District & Contributions	255 Days	0.734	-0.070	0.898	-0.035	-0.171	0.136
		(0.581)	(0.554)	(0.664)	(0.137)	(0.109)	(0.136)
District & Lobbying	1 Day	0.535	-0.271	0.590	0.806	1.764	-0.958
		(0.547)	(0.411)	(0.769)	(0.530)	(0.654)	(0.789)
District & Lobbying	10 Days	0.931	1.278	-0.676	0.035	0.376	-0.341
		(1.033)	(0.966)	(1.617)	(0.296)	(0.269)	(0.295)
District & Lobbying	25 Days	0.516	0.290	-0.082	0.228	0.167	0.061
		(0.755)	(0.971)	(1.191)	(0.329)	(0.305)	(0.181)
District & Lobbying	140 Days	0.623	-0.224	0.842	-0.166	-0.187	0.021
		(0.498)	(0.459)	(0.551)	(0.182)	(0.171)	(0.164)
District & Lobbying	255 Days	0.277	0.309	-0.043	-0.006	-0.172	0.166
		(0.395)	(0.365)	(0.491)	(0.141)	(0.110)	(0.135)

Note: Table assesses whether connected trades appear to be better timed than other trades, using the aggregated, transaction-based portfolio approach where monthly returns are computed for portfolios that are constructed based on trades and five different fixed holding periods. The Buys (Sells) portfolio holds stocks that members bought (sold) for the fixed holding period, the hedged portfolio is a zero cost portfolio that holds the portfolio of buys and sells short the portfolio sells (L/S). The buy, sell, and hedged portfolio are constructed separately for connected and unconnected stocks and then averaged across members. Each cell in the table is a risk adjusted alpha return (with robust standard errors in parenthesis) that is estimated for each transaction based portfolio using the Carhart Four-Factor model that uses as controls the Fama and French (1993) mimicking portfolios (the market excess return ($R_{m,t} - R_{f,t}$), a zero-investment size portfolio (SMB_t), a zero-investment book-to-market portfolio (HML_t)) and the Carhart (1997) momentum factor (MOM_t). Connections are defined as follows: *In District* connected firms are connected to a member since they are located in a member's home district. *Lobbying (any)* connected firms are connected to a member since they lobbied a committee on which the member served. *Contributions (any)* connected firms are connected to a member since they provided her with campaign contributions. *Lobbying (> p50)* and *Contributions (> p50)* connected firms are connected since they provided more than the median lobbying or contribution amount for each member. The estimated excess return on the hedged portfolio built from connected trades is generally positive for 140- and 255-day holding periods (though never significant at conventional levels) and larger than that on the hedged portfolio built from unconnected trades, but the difference is not significant. Further, connected trades are if anything worse than unconnected trades for shorter holding periods, suggesting that short-term timing does not explain the performance advantage of local holdings.

Table 5: Performance of Local Stocks by Firm Size

	(1)	(2)	(3)	(4)	(5)	(6)
	Carhart 4 Factor			CAPM		
In S&P 500	Yes	No	L/S	Yes	No	L/S
$R_{m,t} - R_{f,t}$	0.91	0.93	-0.16	0.95	1.09	-0.25
	(0.04)	(0.06)	(0.10)	(0.05)	(0.08)	(0.10)
SMB_t	0.07	0.47	-0.32			
	(0.07)	(0.10)	(0.16)			
HML_t	0.14	0.26	0.19			
	(0.07)	(0.12)	(0.23)			
MOM_t	-0.19	-0.19	0.05			
	(0.04)	(0.09)	(0.13)			
Alpha	0.34	0.22	0.22	0.28	0.23	0.31
	(0.11)	(0.20)	(0.35)	(0.14)	(0.24)	(0.29)
N	2767	2993	1153	2767	2993	1153
Annualized Alpha	4.08	2.64	2.64	3.36	2.76	3.84

Note: Table assesses whether the local premium seems to depend on the size and visibility of the company. We apply the panel regression model (both Carhart Four-Factor and CAPM) to three portfolios of local stocks: local companies in the S&P 500 (at some point in the 2004-2008 period), local companies not in the S&P 500, and a hedged portfolio long in local S&P 500 companies and short in local non-S&P 500 companies. If the local premium were derived from members' information about low-visibility local companies, we might expect the premium to be larger for non-S&P 500 companies than for S&P 500 companies. We do not find a significant difference between the return on S&P 500 and non-S&P 500 companies; if anything the S&P 500 companies do better.

Table 6: Performance of Local Stocks by Member Group

Local Holdings

	Power Committee			Seniority		
	House	Senate	None	Low	Medium	High
$R_{m,t} - R_{f,t}$	0.77	0.74	1.06	1.04	0.76	0.87
	(0.11)	(0.12)	(0.08)	(0.08)	(0.10)	(0.06)
SMB_t	0.28	0.30	0.26	0.26	0.24	0.41
	(0.14)	(0.14)	(0.13)	(0.14)	(0.10)	(0.12)
HML_t	0.50	0.45	-0.06	0.15	0.17	0.45
	(0.12)	(0.20)	(0.14)	(0.14)	(0.09)	(0.14)
MOM_t	-0.25	-0.15	-0.22	-0.26	-0.17	-0.17
	(0.11)	(0.10)	(0.08)	(0.08)	(0.09)	(0.06)
Alpha	-0.02	0.15	0.43	0.43	0.14	0.14
	(0.23)	(0.25)	(0.22)	(0.23)	(0.16)	(0.25)
N	1275	1229	2103	1621	1953	1033
Annualized Alpha	-0.24	1.8	5.16	5.16	1.68	1.68

Non-Local Holdings

$R_{m,t} - R_{f,t}$	0.85	0.98	0.93	0.90	0.89	0.93
	(0.05)	(0.03)	(0.04)	(0.06)	(0.05)	(0.03)
SMB_t	0.17	-0.00	0.05	0.05	0.16	0.03
	(0.07)	(0.07)	(0.06)	(0.08)	(0.06)	(0.05)
HML_t	0.21	0.00	0.23	0.07	0.22	0.25
	(0.07)	(0.06)	(0.06)	(0.08)	(0.07)	(0.05)
MOM_t	-0.25	-0.07	-0.15	-0.15	-0.15	-0.23
	(0.05)	(0.04)	(0.05)	(0.05)	(0.04)	(0.04)
Alpha	-0.19	-0.10	-0.29	-0.26	-0.20	-0.22
	(0.12)	(0.12)	(0.11)	(0.12)	(0.11)	(0.10)
N	6718	2491	8820	5540	6992	5497
Annualized Alpha	-2.28	-1.2	-3.48	-3.12	-2.4	-2.64

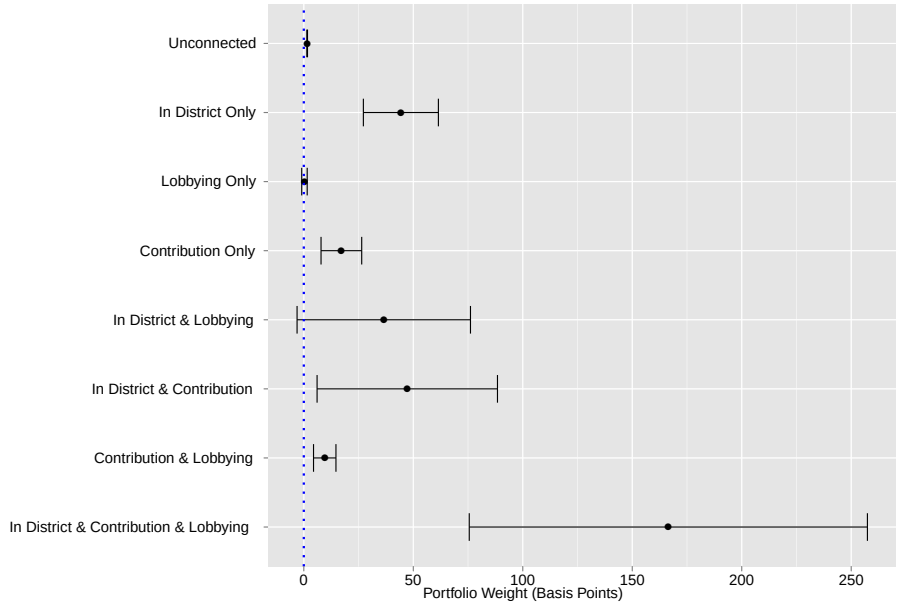
Long/Short

$R_{m,t} - R_{f,t}$	-0.14	-0.21	0.10	0.09	-0.17	-0.06
	(0.18)	(0.13)	(0.12)	(0.08)	(0.14)	(0.08)
SMB_t	0.29	0.30	0.13	0.35	0.08	0.31
	(0.18)	(0.15)	(0.17)	(0.15)	(0.16)	(0.14)
HML_t	0.16	0.42	-0.27	0.02	0.01	0.05
	(0.17)	(0.20)	(0.21)	(0.15)	(0.14)	(0.17)
MOM_t	0.04	-0.10	-0.06	-0.14	-0.05	0.14
	(0.08)	(0.10)	(0.10)	(0.08)	(0.10)	(0.07)
Alpha	0.12	0.36	0.73	0.57	0.43	0.45
	(0.27)	(0.27)	(0.27)	(0.25)	(0.23)	(0.28)
N	1146	1083	2019	1559	1774	915
Annualized Alpha	1.44	4.32	8.76	6.84	5.16	5.4

Note: Alpha returns for 4 Factor Carhart Models using monthly returns of the holdings-based calendar-time portfolios during the 2004-2008 period. The dependent variable is monthly risk adjusted return of a member's holdings of local stock (top panel), holdings of non-local stocks (middle panel), or investments in a zero cost portfolio that holds the portfolio of local stocks and sells short the portfolio of non-local stocks (bottom panel). Local firms are connected to a member since they are located in a member's home district. Controls are the Fama and French (1993) mimicking portfolios (the market excess return ($R_{m,t} - R_{f,t}$), a zero-investment size portfolio (SMB_t), a zero-investment book-to-market portfolio (HML_t)) and the Carhart (1997) momentum factor (MOM_t). Rogers standard errors (clustered by month) are provided in parenthesis.

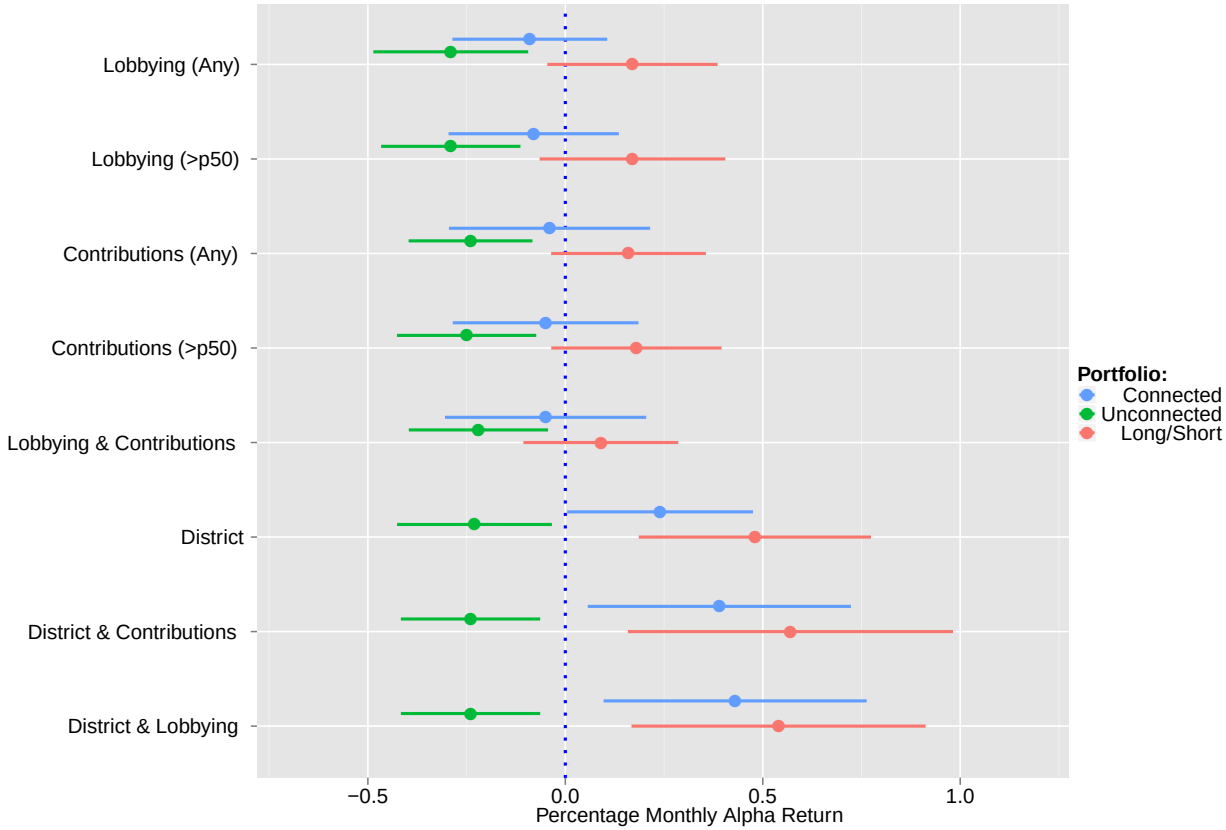
Figures

Figure 1: Portfolio Weights as a Function of Member-Firm Connections



Note: Point estimates (with cluster robust .95 confidence intervals) for average portfolio weights (in basis points) as a function of member-firm connections based on model 2 in Table 2.

Figure 2: Abnormal Returns for Members' Investments in Politically Connected Firms

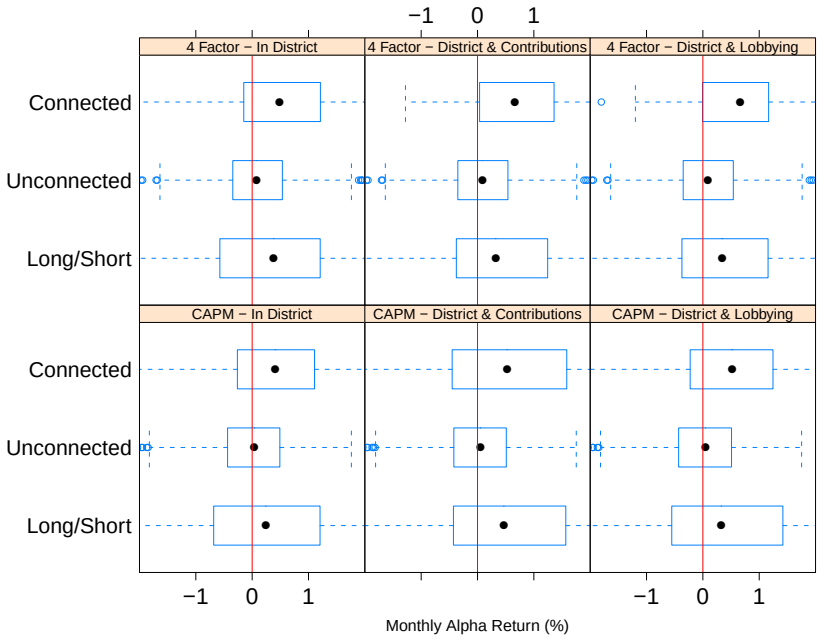


Note: Estimated monthly alpha returns (with .95 confidence intervals) of the holdings-based calendar-time portfolios of all members of Congress that report holding common stocks during the 2004-2008 period. Portfolios are based on information reported in end-of-year financial disclosure reports (see text for details). Alpha returns are from Carhart 4-factor panel model. The dependent variable is monthly risk adjusted return of a member's holdings of connected stocks (CON), holdings of unconnected stocks (UCON), or investments in a zero cost portfolio that holds the portfolio of connected stocks and sells short the portfolio of unconnected stocks (L/S). Connections are defined as follows: *In District* connected firms are connected to a member since they are located in a member's home district. *Lobbying (any)* connected firms are connected to a member since they lobbied a committee on which the member served. *Contributions (any)* connected firms are connected to a member since they provided her with campaign contributions. *Lobbying (> p50)* and *Contributions (> p50)* connected firms are connected since they provided more than the median lobbying or contribution amount for each member. Controls are the Fama and French (1993) mimicking portfolios (the market excess return ($R_{m,t} - R_{f,t}$), a zero-investment size portfolio (SMB_t), a zero-investment book-to-market portfolio (HML_t)) and the Carhart (1997) momentum factor (MOM_t). Confidence intervals are based on Rogers standard errors (clustered by month).

Figure 3: Cumulative Monthly Return for Congressional Investment in Home Districts Companies

Note: Cumulative monthly return is shown for a $100 dollar position in three portfolios beginning in January 2004. The solid (dashed) line is a portfolio that mimics the investments of Members of Congress in stocks of companies that are (not) located in their home districts. The portfolio returns are built by averaging monthly returns across members for each month. The dotted line is the cumulative return on the the CRSP market index (a value-weighted index of stocks listed on the NYSE, AMEX, and NASDAQ).

Figure 4: Distribution of Member Specific Abnormal Returns on Locally Connected Companies



Note: Box plots show the distribution of member specific monthly alpha estimates from a 4-Factor Carhart model and a CAPM respectively for locally connected and unconnected companies as well as a zero cost portfolio that holds long the connected stocks and sells short the unconnected stocks (Long/Short). A company is locally connected if it is headquartered in a member's district. The plot includes all members that have both connected and unconnected investments.

Appendix A (Not for Publication)

In this appendix we present additional results that are referenced in the main paper.

Portfolio Choice Conditional on Holding

Table A.1 below replicates the portfolio choice regression, but restricts the sample to actively-held positions. The results are very similar to that from our unconditional portfolio choice analysis presented in Table 2. Among the companies that they chose to actively hold, members on average place much larger bets in local and contributor companies.

Table A.1: Portfolio Weights as a Function of Member-Firm Connections (Conditional on Holding)

Model	(1)	(2)	(3)	(4)	(5)
Dependent Variable:	Portfolio Weight (bp)				
Mean:	279.59				
In District	274.23	114.95	272.51	264.41	186.73
	(87.06)	(66.64)	(87.27)	(84.62)	(81.31)
Lobbying (Any)	11.80	14.97			
	(16.36)	(16.22)			
Contributions (Any)	44.53	80.15			
	(21.55)	(48.95)			
In District & Lobbying (Any)		339.93			
		(230.33)			
In District & Contributions (Any)		428.58			
		(284.77)			
Lobbying (Any) & Contributions (Any)		45.23			
		(26.74)			
In District & Contributions(Any) & Lobbying (Any)		509.35			
		(214.96)			
Lobbying (> p50)			3.99		
			(19.93)		
Contributions (> p50)			51.94		
			(29.92)		
Lobbying Strength				0.02	0.02
				(0.03)	(0.03)
Contribution Strength				0.03	0.02
				(0.02)	(0.02)
Lobbying Strength · In District					0.02
					(0.14)
Contribution Strength · In District					0.10
					(0.09)
Member Fixed Effects	✓	✓	✓	✓	✓
Firm Fixed Effects	✓	✓	✓	✓	✓
N	15,093				

Note: Regression coefficients with standards errors clustered by members in parenthesis. The dependent variable is the *portfolio weight*, i.e. the share of holdings of a firm in a member's portfolio (in basis points). Members' portfolios are computed as average holdings over the 2004-2008 period. *In District* is a binary indicator for firms that are connected to a member since they are located in a member's district. *Lobbying (any)* is a binary indicator for firms that are connected to a member since they lobbied a committee on which the member served. *Contributions (any)* is a binary indicator for firms that are connected to a member since they provided her with campaign contributions. *Lobbying (> p50)* and *Contributions (> p50)* are binary indicators for firms that provided more than the median lobbying or contribution amount for each member. *Lobbying Strength* and *Contribution Strength* measure a firm's share of lobbying or contributions relative to each member's total lobbying or contributions (in basis points). All regressions include a full set of member and firm fixed effects (coefficients not shown here).

Alpha Returns for Investments in Politically Connected Stocks

Table A.2 replicates the analysis of Table 3 using the single-time series approach where the monthly returns are first aggregated across members (equal-weighted) to a single monthly portfolio return.

Table A.2: Monthly Abnormal Return for Connected and Unconnected Stocks

	Average Member Portfolio		
	Connected	Unconnected	Long/Short
Panel A: Excess Returns from CAPM			
Lobbying (Any)	-0.244	-0.196	-0.048
	(0.113)	(0.130)	(0.171)
Lobbying ($> p50$)	-0.241	-0.265	0.024
	(0.128)	(0.107)	(0.154)
Contributions (Any)	-0.147	-0.28	0.133
	(0.175)	(0.086)	(0.151)
Contributions ($> p50$)	-0.14	-0.312	0.172
	(0.176)	(0.090)	(0.140)
Lobbying & Contributions	-0.141	-0.265	0.124
	(0.163)	(0.091)	(0.136)
In District	0.354	-0.335	0.688
	(0.192)	(0.093)	(0.173)
District & Contributions	0.354	-0.327	0.681
	(0.190)	(0.094)	(0.169)
District & Lobbying	0.433	-0.324	0.757
	(0.192)	(0.091)	(0.155)
Panel B: Excess Returns from Carhart 4-Factor			
Lobbying (Any)	-0.124	-0.249	0.125
	(0.095)	(0.094)	(0.129)
Lobbying ($> p50$)	-0.115	-0.264	0.149
	(0.110)	(0.076)	(0.126)
Contributions (Any)	-0.019	-0.259	0.239
	(0.137)	(0.074)	(0.112)
Contributions ($> p50$)	0.016	-0.277	0.293
	(0.139)	(0.079)	(0.118)
Lobbying & Contributions	-0.038	-0.227	0.189
	(0.139)	(0.078)	(0.117)
In District	0.423	-0.272	0.696
	(0.152)	(0.086)	(0.168)
District & Contributions	0.500	-0.274	0.774
	(0.178)	(0.084)	(0.204)
District & Lobbying	0.529	-0.268	0.797
	(0.173)	(0.078)	(0.177)

Note: Monthly alpha returns for calendar time portfolios of investments in connected and unconnected stocks over the 2004-2008 period. Average member returns are for a portfolio that mimics the investments of the average member of Congress (equal member weighted) in either connected or unconnected stocks. Long-short is the monthly average return of a zero cost portfolio that holds the portfolio of connected stocks and sells short the portfolio of unconnected stocks. The connections are defined as follows: *In District* connected firms are connected to a member since they are located in a member's home district. *Lobbying (any)* connected firms are connected to a member since they lobbied a committee on which the member served. *Contributions (any)* connected firms are connected to a member since they provided her with campaign contributions. *Lobbying (> p50)* and *Contributions (> p50)* connected firms are connected since they provided more than the median lobbying or contribution amount for each member. CAPM is the result from a time-series regression of the member excess return on the market excess return. Carhart 4-factor is the result from a time-series regression of the member excess return on the Fama and French (1993) mimicking portfolios and the Carhart (1997) momentum factor. Robust standard errors are presented in parentheses.

Alpha Returns for Company-Level Connected and Unconnected Stocks

Table A.3 uses the aggregated, single time series approach to assess the possibility that companies that had more political connections (lobbying and contributions) systematically outperformed companies that did not. Here we label investments as connected if the company did *any* lobbying/contributions (as opposed to if the company ever lobbied the committee of (or provided campaign contributions to) the member who owns the stock). The fact that the connected portfolios defined this way do not outperform the unconnected portfolios suggests that connected companies did not systematically do better; instead, it must be that members who were connected to a certain company did better investing in that company than did other members who were not connected to it, probably because they knew when to invest.

Table A.3: Abnormal Returns for Company Level Connected and Unconnected Stocks

	Average Member Portfolio		
	Connected	Unconnected	Long/Short
Panel A: Abnormal Returns from CAPM			
Lobbying (Any)	-0.247	-0.06	-0.187
	(0.144)	(0.197)	(0.230)
Contributions (Any)	-0.282	-0.062	-0.219
	(0.172)	(0.121)	(0.207)
Panel B: Abnormal Returns from Carhart 4-Factor			
Lobbying (Any)	-0.126	-0.154	0.028
	(0.100)	(0.119)	(0.133)
Contributions (Any)	-0.108	-0.17	0.062
	(0.112)	(0.110)	(0.143)

Note: Monthly alpha returns for calendar time portfolios of investments in connected and unconnected stocks over the 2004-2008 period. Average member returns are for a portfolio that mimics the investments of the average member of Congress (equal member weighted) in either connected or unconnected stocks. Long-short is the monthly average return of a zero cost portfolio that holds the portfolio of connected stocks and sells short the portfolio of non-connected stocks. The connections here are defined only at the company, not the company-member levels, so for all members a company is coded as connected if it provided campaign contributions (or lobbying depending on the connection) to *any* member in the sample. CAPM is the result from a time-series regression of the member excess return on the market excess return. Carhart 4-factor is the result from a time-series regression of the member excess return on the Fama and French (1993) mimicking portfolios and the Carhart (1997) momentum factor.