

Political Capital: Corporate Connections and Stock Investments in the U.S. Congress, 2004–2008*

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ABSTRACT

Recent research suggests that, public perceptions notwithstanding, members of Congress are rather mediocre investors. Why do the consummate political insiders fail to profit as investors? We consider various explanations that pertain to members' political relationships to public firms. We show that members of Congress invest disproportionately in local firms and campaign contributors, which suggests that overall underperformance cannot be explained by the absence of

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political considerations in members' portfolio decisions. These connected investments (and particularly local investments) generally outperform members' other investments, which suggests that poor performance is not explained by an excessive political skew in members' portfolios. It appears that members of Congress earn poor investing returns primarily because their non-connected investments perform poorly, perhaps due to the usual failings of individual investors; a combination of political and financial considerations may explain why they do not make more extensive use of their political advantages as investors.

In recent years, members of Congress have been extensively criticized for investing on the basis of privileged political information in contravention of legislative ethics and common understandings of insider trading law. Most prominently, Schweizer (2011) highlights anecdotes of profitable stock trades reported in members' annual financial disclosures, arguing based on more comprehensive analysis in Ziobrowski *et al.* (2004) and Ziobrowski *et al.* (2011) that politicians systematically exploit their political positions for corrupt private gain. In a recent paper, Eggers and Hainmueller (2013) question the evidence behind these claims both by highlighting the mixed results of previous academic studies and finding that, in the five years between 2004 and 2008, congressional portfolios show no evidence of either unusual average trading acumen or above-market annual portfolio returns.

The findings in Eggers and Hainmueller (2013) about members' poor overall investing performance leave us with an important puzzle. Much research in political economy shows that politicians and firms benefit financially from exchange relationships.¹ Why then is it that these consummate political insiders, many of whom have access to privileged information about legislative and regulatory events that affect markets, fail to match market indexes? Several explanations are possible. One explanation for members' poor overall investing performance is that there is simply nothing special about politicians' investments; they may hold plain-vanilla portfolios that are unrelated

¹ On the financial benefits from political connections for firms see Roberts (1990), Fisman (2001), Johnson and Mitton (2003), Khwaja and Mian (2005), Faccio (2006), Jayachandran (2006), Goldman *et al.* (2009), Ferguson and Voth (2008). On the financial benefits for politicians from connections to firms see Diermeier *et al.* 2005, Dal Bò *et al.* (2006), Eggers and Hainmueller (2009), Lenz and Lim (2010), Querubin and Snyder (2013).

to their political activities, perhaps because (like many investors) they delegate investment decisions to others. A second explanation is that members respond to concerns about conflicts of interest and legislative ethics and therefore actively seek not to invest in companies about which they may have special information or whose fortunes they may be able to affect through legislation or committee oversight. Yet another explanation is that members are constrained by competing political goals, such as the desire to cement relationships with firms from which they seek political support; in that case, the poor overall investing performance that Eggers and Hainmueller (2013) document may reflect only the financial part of a larger endeavor in which politicians maximize combined financial and political returns.

Existing studies (including Eggers and Hainmueller, 2013) provide very little indication which of these accounts helps to explain Congress's puzzlingly mediocre investing record. A key reason for this is that none of the existing research links congressional investing performance to the political connections between members and firms. Ziobrowski *et al.* (2004), Ziobrowski *et al.* (2011), and Eggers and Hainmueller (2013) measure overall investing returns in Congress as a whole as well as in subgroups of members (defined by chamber, seniority, party, etc.), but they do not ask whether members of Congress invest in firms to which they are politically connected, nor do they assess whether these connections are reflected in members' investment returns. All of these studies propose that public scrutiny may affect Congress's overall investing performance, but without disaggregated analysis of congressional portfolios these interpretations remain speculative at best.

In this paper, we go further and focus on political relationships between members and firms and investigate how these relationships are manifested in politicians' portfolio choices and investment returns. We highlight three kinds of connections between members and firms, defined by geography (whether the firm is located in the member's district), campaign contributions (whether the firm's PAC contributed to the member's election campaigns), and legislative oversight (whether the firm lobbied legislation before the member's committees). We ask whether members invest disproportionately in firms to which they are connected in each of these ways, and we measure how these connected investments perform compared to both the rest of their portfolios and market benchmarks. In each case, we are the first to carry out this level of analysis of politicians' stock investments; previous studies have focused exclusively on overall investment returns rather

than examining how portfolio returns vary with the relationship between members and firms.²

Our analysis of members' portfolio choices rules out the first explanation for poor overall performance: members do not hold plain-vanilla portfolios. Strikingly, their investments show two kinds of political skew. First, members' stock holdings are heavily skewed toward local firms in their home districts; this local skew is far larger than has been shown for other individuals and for professional money managers (Ivković and Weisbenner, 2005; Coval and Moskowitz, 1999) and is evident even when we exclude members who entered into politics after serving as executives for public companies headquartered in their districts. Second, members' stock holdings are also skewed (although less so) toward firms whose PACs gave them campaign contributions; this skew is evident even when controlling for whether or not the firm is headquartered in their district. In contrast, we find no evidence that members disproportionately invest in companies to which they are connected through their committee assignments. These findings are robust to a variety of checks involving alternative definitions of the member-firm connections and alternative model specifications, including the use of fixed effects for members and companies.

Although the skew of members' portfolios toward local firms and campaign contributors casts doubt on the idea that there is nothing political about congressional investments, these findings are consistent with several alternative explanations. The skew toward local companies and contributors could indicate that members expect these investments to do particularly well, whether because of their extensive knowledge of these firms, their advance knowledge of legislation affecting these firms, or their power over these firms; alternatively, it could also indicate that members simply invest in what they know (Heath and Tversky, 1991; Huberman, 2001) or that they invest in these firms as part of an attempt to signal their policy preferences or otherwise obtain political and financial support. The first set of explanations implies that these politically skewed investments might perform better than average due to politicians' unusual knowledge and power; the second set of explanations implies that these investments might perform rather poorly due to either the usual shortcomings of investing in what is familiar (Seasholes and

² In concurrent and independent work, Tahoun (2014) examines the timing (but not the performance) of members' investments in large-cap firms that contribute to their re-election campaigns.

Zhu, 2010; Coval and Moskowitz, 2001) or the non-financial reasons driving politicians to forge political relationships with specific firms.

In order to distinguish between these possibilities we turn to an analysis of the investment returns of members' connected portfolios. 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. Most remarkably, we find that members' local investments perform quite well on average, outperforming not just the rest of their portfolios but also the market with excess returns of around 3% per year. The finding of high local returns is robust to various specifications; the returns are even higher when the local company also contributes money to the member or lobbies legislation before her committees. The finding that members' local holdings beat the market contradicts the idea that overall portfolio performance is poor because of members' strong local skew; it also casts doubt on the explanation that members invest in local companies simply because of familiarity bias or to cement political support.

What accounts for the strong performance of the local portfolios of members of Congress? We conclude the data analysis with an investigation of this question. Relevant possible explanations of members' local advantage include advance knowledge of pending legislation, regulatory events, or earnings announcements; unusual knowledge of local firms' prospects based on extensive interactions with the firm; and the ability of powerful members to secure legislative benefits for favored local firms. We examine these explanations by looking at members' trading acumen in dealing with local firms and comparing returns on local portfolios defined by firm characteristics and degrees of member power.

While no test can decisively rule out any particular explanation, we find no evidence that members profit in their local investments based on timely trades (which would suggest advance knowledge of legislative events or firm announcements), nor do we find that powerful members do especially well in their local investments (which would be consistent with the idea that the large local returns come from members securing political benefits for favored firms). We also do not find that portfolios of small local firms do better than portfolios of large local firms, suggesting that it is not simply that members know about firms that analysts ignore. Together, these tests suggest that members who invest locally are like highly informed securities analysts, who perhaps benefit from their personal connections to local

executives (Cohen *et al.*, 2008); there is no particular evidence that these local returns are corrupt or reflect the use of political insider information.

Taken together, our findings help to rule out some explanations of the puzzling under-performance of congressional portfolios while highlighting some interesting aspects of the relationship between members and firms. It does not appear to be the case that members of Congress fail to earn out-sized investment returns simply because they have nothing to do with their investments: their stock portfolios differ markedly from what a disinterested portfolio manager would select, primarily because they heavily overweight local companies and companies that contribute to the members' campaigns. It also does not appear to be the case that members' investments are particularly hampered by these possibly politically motivated investments; in fact, the connected investments (particularly the local investments) outperform the others. Overall, it seems that the respectable performance of members' local investments is simply outweighed by the mediocre performance of the rest of their portfolios, which appear to reflect the usual failings of individual investors (see, e.g., Barberis and Thaler, 2003). Given our findings it might appear surprising that members do not reorient their portfolios more toward their local investments with superior performance; we return to this question in the conclusion of the paper.

1 Political Relationships and Politicians' Investments

Members of Congress are free to invest in blind trusts, which bar the owners from active involvement in their investments, but the large majority choose not to do so. In accordance with the Ethics in Government Act (1978), they must therefore annually disclose their investment holdings and trades (along with other financial information).³ The question we ask in this paper is how members' investment activities reflects their political connections to public firms and whether these relationships could somehow explain the puzzling underperformance of congressional investors. It is relatively straightforward to imagine how politicians may have a financial advantage in investing in firms to which they are politically connected: these are the firms about which they have information and over which they may have political power. The idea that studying political relationships may help us understand poor

³ The STOCK Act (2012) requires more frequent and detailed disclosure.

overall performance in Congress is more subtle so we pause to elaborate upon it here before moving to the data analysis.

One possibility is that members of Congress perform poorly as investors because they carefully avoid investing in the firms to which they are politically connected. To the extent that they do so, they may give up any potential investing advantage and thus their mediocre performance is unsurprising. The idea that members of Congress make the ethical or political decision to abstain from investing in firms to which they are politically connected does not fit with the anecdotes related in Schweizer (2011), but the question has not yet been systematically addressed. If such restraint is widespread, we would expect to see that members tend to under-invest in companies with which they have political connections; those connected investments that they do make may perform well or not, depending on the extent of members' restraint.

Another possibility to consider is that members of Congress perform poorly as investors because they invest in firms to which they have political connections at least partly to achieve political and not just financial ends. Why might owning stock serve a political purpose? As noted, the investments of members of Congress are public. By disclosing that she owns stock in a local company, a member of Congress may hope to communicate to her constituents that she is devoted to the constituency and foresees a strong local economic future. By buying stock in a potential contributor, a member of Congress may attempt to align incentives with a firm, thus helping to make possible further mutually beneficial political exchange in an environment where contracts are unenforceable (McCarty and Rothenberg, 1996; Kroszner and Stratmann, 2005).⁴ Or, a member may simply hope to communicate her policy preferences in part by owning stock in a company: a politician who is eager to receive political contributions from tobacco firms may buy tobacco stock in order to distinguish herself from other politicians who face higher political costs of being associated with such firms.⁵ To the

⁴ Thus some investments could 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). Of course, in the case of members of Congress there is no mechanism by which members can commit to continue holding a firm's stock; this must reduce the value of stock holdings as a means of aligning incentives in this setting.

⁵ 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.

extent that members of Congress pursue political aims via their investments in any of these ways, we would expect to see disproportionate investments in local firms, contributors, and firms with which members are otherwise actively engaged in political exchange; the fact that these investments are partially motivated by political considerations implies that they may perform poorly and may thus help to explain the overall mediocre performance of congressional stock portfolios.

2 Data and Measures of Member-Firm Connections

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 (CRP). 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.⁶

In the right panel of Table 1 we present summary statistics describing the stock transactions of members in our dataset; for each member, we calculate the value and number of transactions in each year and then average across years to get member-level yearly averages. As in the period covered by Ziobrowski *et al.* (2004) and Ziobrowski *et al.* (2011), the distribution of annual transactions across members is 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.

⁶ The data collection process and summary statistics are described in more detail in Eggers and Hainmueller (2013).

Table 1. The common stock holdings and transactions of members of Congress.

	Holdings		Annual Transactions			
			Buys		Sells	
	\$ Value	Number	\$ Value	Number	\$ Value	Number
Min	501	1	0	0	0	0
25th pctile	26,424	2	0	0	11,010	1
Median	93,827	5	17,656	2	39,636	3
75th pctile	451,169	21	105,960	9	186,068	11
Max	140,767,979	331	32,253,189	424	47,615,848	478
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 holding 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 and Eggers and Hainmueller (2013) for details).

The left panel of Table 1 displays the summary statistics for the annual averages of member portfolios for the 2004–2008 period. 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. Just as with the stock transactions, the distribution of stock holdings is strongly skewed: the median member on average holds stocks worth about \$93,000 in 5 companies, while the average member holds about \$1.7 million in 19 companies.

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. To measure this connection, we obtained the location of each company's headquarters from Compustat and assigned this address to a congressional

district. For senators, an investment is considered in-district if the company is headquartered in the senator's state.

The second connection measures 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 and linked PACs to companies and their contributions to members (289,694 reports totaling \$466.5 million). This allows us to record, for each stock holding, how much the company contributed to the owner's election campaigns.

Finally, the third connection is intended to measure whether a member oversees a company through his or her committee assignments. We used the lobbying disclosure database provided by the 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 "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 referred⁷; this gives us a measure of how closely linked the company's lobbying priorities are to the owner's committee responsibilities.⁸

⁷ 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.

⁸ 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. 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.

The average member has about 6% of his or her investments (by value) in local firms, 15% in contributors, and 49% in companies that lobby legislation before his or her committees; below we look at more restrictive definitions of both contributions-based and lobbying-based connections.

Do Members Invest in Firms to Which They Are Connected?

In this section, we test whether members of Congress place smaller or larger investments in companies with which they are politically connected. To assess members' portfolio choices, we examine the weight that a member puts on a company in her portfolio as a function of the connections she has with the company.⁹ In particular, we estimate a regression of the form

$$w_{ij} = \alpha + \beta_1 \text{District}_{ij} + \beta_2 \text{Contributions}_{ij} + \beta_3 \text{Lobbying}_{ij} + \theta_i + \theta_j + \varepsilon_{ij},$$

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, $\text{Contributions}_{ij}$ 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, and Lobbying_{ij} is an indicator that takes the value 1 if the company lobbied legislation before the member's committee and 0 otherwise. We also include a full set of member and company fixed effects, θ_i and θ_j , so that the β coefficients on the measures of member-firm connections are identified only based on within-member and within-company variation. The specification therefore controls for all unobserved factors that vary across members or firms and might be correlated with our measures of member-firm connections.¹⁰ Such explanations are ruled out by the company and member fixed effects and therefore cannot account for the portfolio skew identified by the β coefficients.

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

⁹ See Cohen *et al.* (2008) for another example of this kind of analysis.

¹⁰ For example, larger companies might be more likely to contribute through PACs and also attract more stock investments independent of particular member-company connections, or members that represent districts with more companies might be more likely to invest in local companies regardless of particular member-company connections.

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 (8.49)	44.33 (8.73)	50.68 (8.48)	51.10 (8.44)	39.29 (8.64)
Lobbying (Any)	0.09 (0.64)	0.29 (0.64)			
Contributions (Any)	12.64 (2.37)	17.15 (4.73)			
In District & Lobbying (Any)		36.52 (20.17)			
In District & Contributions (Any)		47.25 (20.98)			
Lobbying (Any) & Contributions (Any)		9.56 (2.61)			
In District & Contributions (Any) & Lobbying (Any)		166.48 (46.32)			
Lobbying (>p50)			-0.20 (1.30)		
Contributions (>p50)			22.06 (4.15)		
Lobbying Strength				-0.01 (0.03)	-0.02 (0.02)
Contribution Strength				0.05 (0.01)	0.04 (0.01)
Lobbying Strength · In District					1.38 (0.99)
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 because they are located in a member's home district. *Lobbying (any)* is a binary indicator for firms that are connected to a member because they lobbied a committee on which the member served. *Contributions (any)* is a binary indicator for firms that are connected to a member because 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).

strong skew in members' portfolios toward firms to which those members are politically connected. The average portfolio weight in the data is 3.88 basis points, meaning 0.0388 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. Model 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.

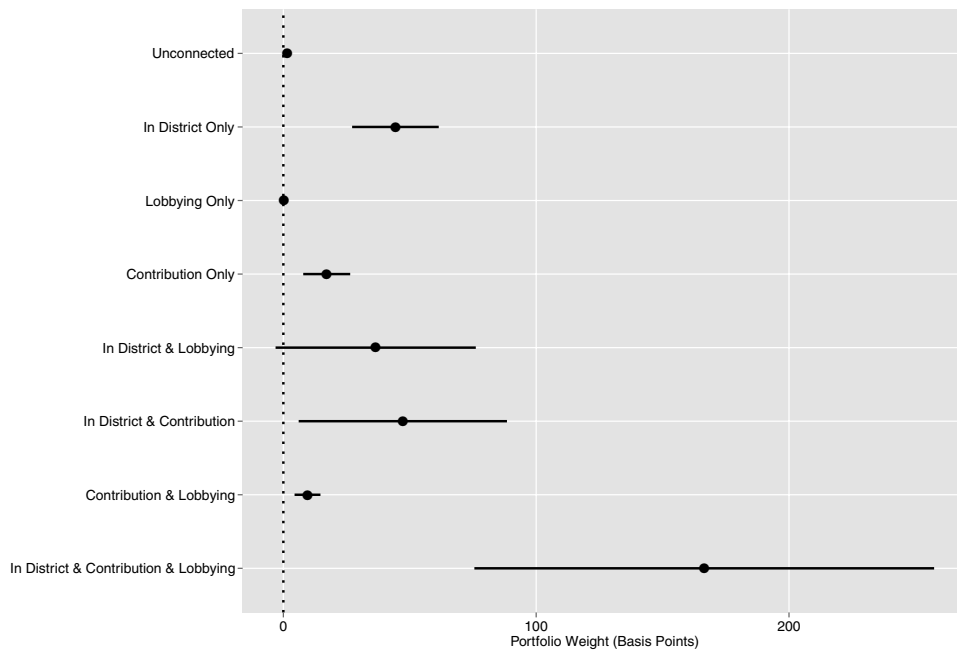


Figure 1. Portfolio weights as a function of member-firm connections.

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.

A local bias has been found for other types of investors, but the magnitude of the local 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). Considering that members of Congress probably have a far greater exposure to non-local companies than the average individual investor whose portfolio has been analyzed in other studies, the larger local bias in Congress seems particularly striking.

How robust are these findings? Models 3–5 extend the analysis by using different measures that consider the strength of the contributions and lobbying connection. Model 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. Model 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. Model 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 toward 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 toward 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 the 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 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. The results are also robust when we run the regressions separately for each chamber (Table A.2). Finally, we find that the results are similar when replicated with a Tobit model. Taken together these results suggest that members do not hold plain-vanilla portfolios that are unrelated to their political activities. Instead, members place considerably larger bets in companies to which they are politically connected.

3 Political Connections and Portfolio Performance

What might explain the strong skew toward local companies and PAC contributors and how does it relate to overall performance? On the one hand, the fact that members disproportionately invest in local firms is consistent with empirical finance research studying the behavior of individual investors and money managers alike; the fact that neither groups' local investments perform particularly well suggests that familiarity bias rather than expertise drives these decisions (Heath and Tversky, 1991; Huberman, 2001). In other words, investors seek out local companies because they are more available to them and more familiar in memory and not because investors possess value-relevant information about them. To the extent that the same is true of members of Congress, the large local bias (and possibly the bias toward PAC contributors) may help explain the overall mediocre performance of members' portfolios. If we add to this the possibility that members invest in these firms as a kind of cheerleading or possibly to cement ongoing political relationships, we might expect these connected investments to perform all the worse.

On the other hand, the strong skew toward local companies and campaign contributors is also consistent with the explanation that members seek out these firms for financial reasons. When members of Congress interact with local firms and campaign contributors, they may gain valuable information about these firms' prospects that would help them earn investing profits; in addition, members may invest disproportionately in local firms and campaign contributors because their political positions give them either unusual information about legislative events affecting these firms or actual power over legislative outcomes (earmarks, tax breaks, regulations) that affect these firms. This suggests that members' connected investments might perform quite well.

To distinguish among these possibilities we turn to investigating the performance of members' connected portfolios relative to their other investments and relative to the market. 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.¹¹ 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

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

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.¹² The key quantity of interest in this panel regression is the intercept α , 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).

¹¹ 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).

¹² 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 Web site at http://mba.tuck.dartmouth.edu/pages/faculty/ken.french/data_library.html.

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 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).¹³ Finally, we carry out our panel regression on each of the three portfolios.¹⁴ 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.

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 0.23% per month (see Eggers and Hainmueller, 2013 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 0.16 to 0.18 reported in models (4), (7), (10), and (13). Model (16) reports that the estimated alpha for the local hedged portfolio is a statistically significant 0.48, indicating that investors could handily beat the market by mimicking members' local investments and shorting their

¹³ The hedged portfolio returns are calculated using member-months in which the member held both connected and unconnected stocks. This explains why the sample size is smaller for the hedged portfolio regressions than for the regressions estimating the corresponding connected and unconnected portfolios; it also explains why in many cases the return on the hedged portfolio is not approximated by the difference in returns between the connected and unconnected portfolios.

¹⁴ See Cohen *et al.* (2008) for a similar approach to assessing the role of company-investor connections in portfolio performance.

Table 3. Abnormal returns for stock investments of members of Congress in politically connected firms.

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 (0.03)	0.90 (0.05)	0.94 (0.04)	-0.10 (0.08)	0.88 (0.05)	0.93 (0.03)	-0.10 (0.09)	0.76 (0.05)	0.93 (0.03)	-0.15 (0.04)	0.73 (0.05)	0.92 (0.03)	-0.20 (0.03)
SMB _t	0.10 (0.05)	-0.08 (0.06)	0.37 (0.06)	-0.40 (0.08)	-0.07 (0.07)	0.27 (0.05)	-0.32 (0.08)	-0.07 (0.09)	0.18 (0.05)	-0.25 (0.07)	-0.05 (0.09)	0.15 (0.05)	-0.18 (0.08)
HML _t	0.21 (0.05)	0.07 (0.06)	0.26 (0.06)	-0.14 (0.08)	0.07 (0.06)	0.22 (0.05)	-0.16 (0.08)	0.21 (0.07)	0.15 (0.05)	0.12 (0.05)	0.17 (0.07)	0.16 (0.05)	0.06 (0.06)
MOM _t	-0.18 (0.04)	-0.18 (0.04)	-0.11 (0.04)	-0.08 (0.05)	-0.19 (0.04)	-0.14 (0.04)	-0.08 (0.04)	-0.22 (0.05)	-0.14 (0.04)	-0.15 (0.04)	-0.24 (0.04)	-0.16 (0.04)	-0.18 (0.04)
Alpha	-0.23 (0.09)	-0.09 (0.10)	-0.29 (0.10)	0.17 (0.11)	-0.08 (0.11)	-0.29 (0.09)	0.17 (0.12)	-0.04 (0.13)	-0.24 (0.08)	0.16 (0.10)	-0.05 (0.12)	-0.25 (0.09)	0.18 (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
Annual 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

(Continued)

Table 3. (Continued)

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 (0.05)	0.91 (0.03)	-0.05 (0.06)	0.78 (0.05)	0.92 (0.03)	-0.13 (0.04)	0.92 (0.09)	0.90 (0.03)	-0.08 (0.15)	0.90 (0.07)	0.90 (0.03)	-0.07 (0.09)
SMB _t	0.28 (0.07)	0.09 (0.05)	0.23 (0.10)	-0.10 (0.09)	0.16 (0.05)	-0.24 (0.08)	0.04 (0.11)	0.10 (0.05)	0.13 (0.15)	0.04 (0.10)	0.10 (0.05)	0.08 (0.11)
HML _t	0.23 (0.07)	0.19 (0.06)	0.02 (0.10)	0.19 (0.07)	0.16 (0.05)	0.10 (0.06)	0.04 (0.13)	0.21 (0.06)	-0.10 (0.20)	0.15 (0.10)	0.21 (0.05)	0.12 (0.11)
MOM _t	-0.21 (0.06)	-0.18 (0.04)	-0.05 (0.06)	-0.19 (0.05)	-0.16 (0.04)	-0.11 (0.04)	-0.23 (0.07)	-0.18 (0.04)	-0.14 (0.08)	-0.22 (0.05)	-0.18 (0.04)	-0.19 (0.06)
Alpha	0.24 (0.12)	-0.23 (0.10)	0.48 (0.15)	-0.05 (0.13)	-0.22 (0.09)	0.09 (0.10)	0.39 (0.17)	-0.24 (0.09)	0.57 (0.21)	0.43 (0.17)	-0.24 (0.09)	0.54 (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
Annual 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 the 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). See text for details on the definitions of the connections. 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.

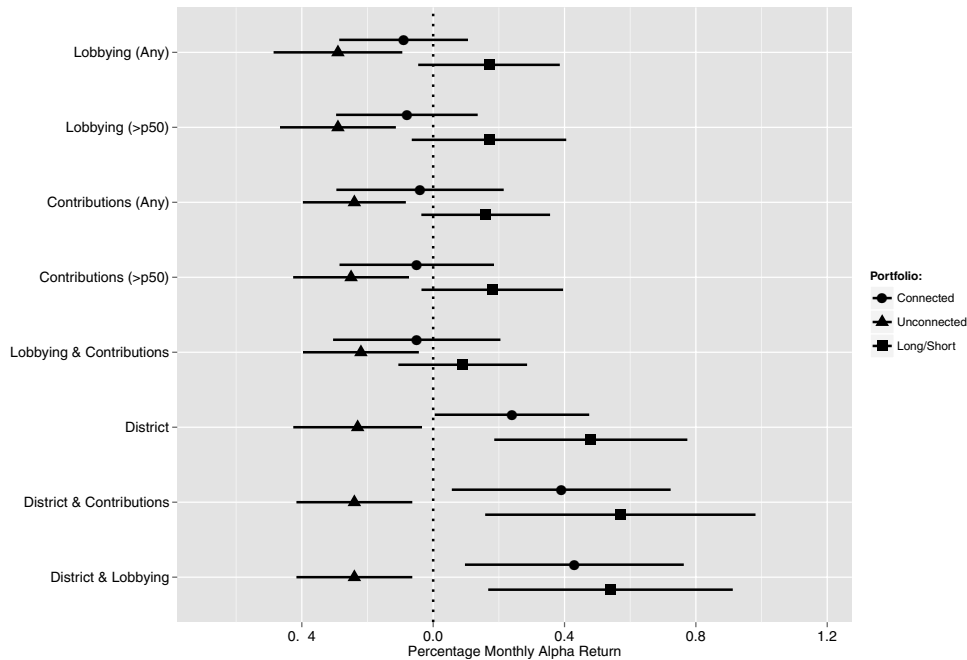


Figure 2. Abnormal returns for members' investments in politically connected firms.

Note: Estimated monthly alpha returns (with 95% confidence intervals) based on Models 2-25 in Table 3.

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

Not only do members' investments in local firms beat 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 0.24 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

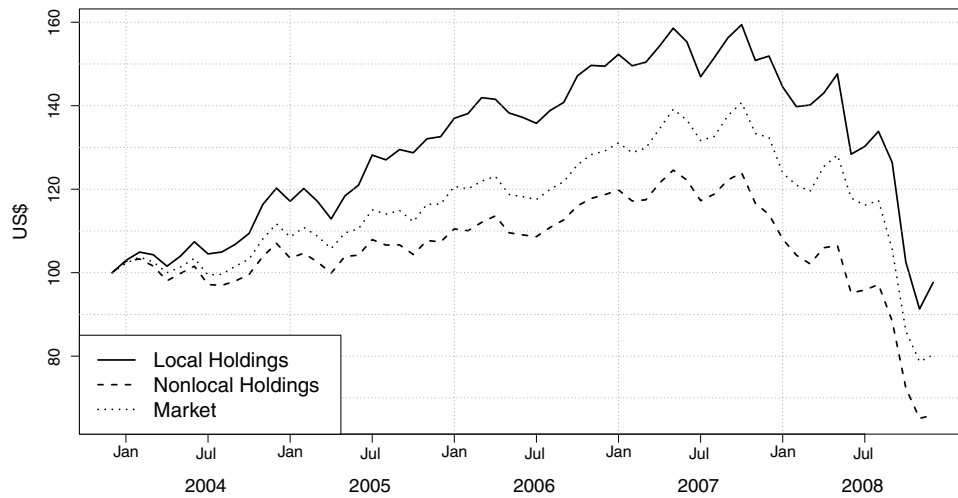


Figure 3. Cumulative monthly return for Congressional investment in home districts companies.

Note: Cumulative monthly return 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 CRSP market index (a value-weighted index of stocks listed on the NYSE, AMEX, and NASDAQ).

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 displays 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.¹⁵ 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

¹⁵ 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.

would be worth about \$80 by the end of 2008, whereas the same amount invested in the congressional portfolio of local stocks (solid line) would be worth about \$97, and the same amount 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 is consistent across the entire time period, including the market decline and crash in 2007 and 2008.

Additional analysis confirms that these findings are robust to various alternative specifications and weightings. First, Table A.3 in the appendix shows that the basic findings in Table 3 are robust to applying the CAPM and Carhart Four-Factor models to a single portfolio that aggregates all congressional investments (rather than using the panel approach described above).¹⁶ 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, 0.23, 0.40, and 0.39 for the in-district, in-district and contributions, and in-district and lobbying connection respectively). These additional findings suggest that the abnormal returns we find for local investments are not driven by a few unusual members.¹⁷

Taken together, these findings strongly indicate that the skew toward local and contribute companies do not result from familiarity bias or the intention to cement political exchanges. They also suggest that investments in connected portfolios cannot account for members' mediocre overall performance. However, they do raise the question of what might explain the superior performance of investments in home district companies. We now turn to that question.

¹⁶ 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.

¹⁷ We also investigated whether our findings could be explained by the few members who were corporate executives in local firms before entering Congress. We identified all members who reported stock holdings and also previously served as an executive in a publicly traded company headquartered in their district. Both the local bias in portfolio holdings and the local premium in investment performance are basically unchanged when these members are excluded from the analysis.

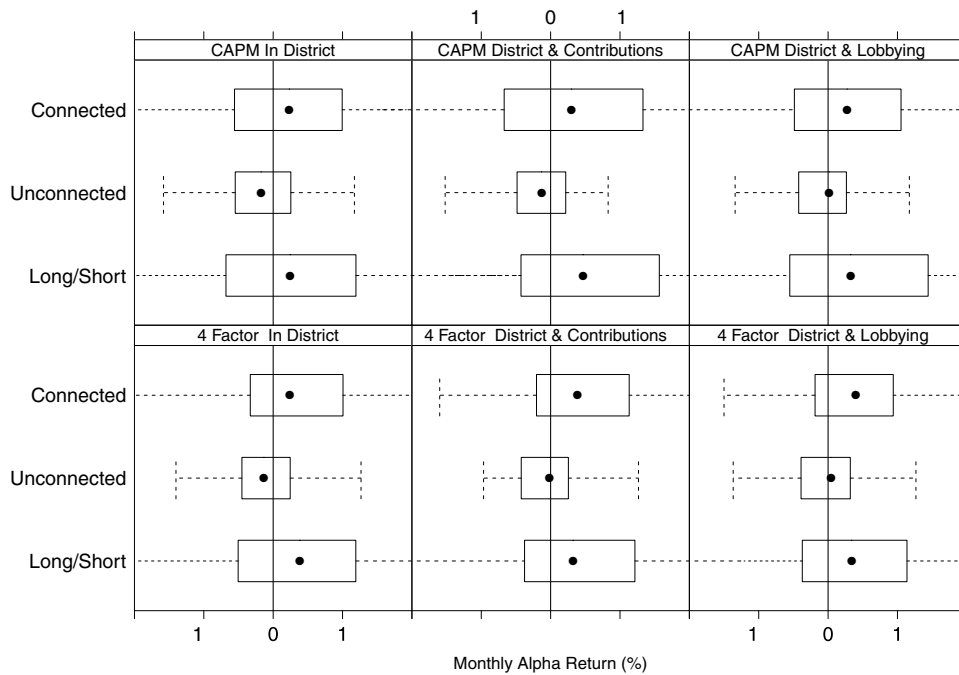


Figure 4. Distribution of member specific abnormal returns on locally connected companies.

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 head-quartered in a member's district. The plot includes all members that have both connected and unconnected investments.

4 Explaining the Local Investing Advantage of Congress

What explains the advantage members of Congress have in investing in local companies? Broadly, we see four 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 secure political benefits for local portfolio firms (and thus improve their financial performance) by inserting favorable clauses in legislation or exerting influence on regulators. 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 examine which ones are more important. First, we study 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 portfolios 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 or their ability to help firms in which they have invested.

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

Table 4. Abnormal returns on transaction-based portfolios by connection and holding period.

Connection	Holding Period	Average Member Portfolio					
		Connected			Unconnected		
		Buys	Sells	L/S	Buys	Sells	L/S
In District	1 Day	0.229 (0.574)	-0.371 (0.791)	0.315 (1.04)	0.785 (0.481)	1.703 (0.776)	-0.918 (0.877)
In District	10 Days	-0.344 (0.725)	0.879 (0.895)	-1.120 (1.143)	0.048 (0.265)	0.357 (0.257)	-0.308 (0.319)
In District	25 Days	0.394 (0.603)	0.798 (0.889)	-0.404 (0.929)	0.227 (0.285)	0.113 (0.277)	0.114 (0.171)
In District	140 Days	0.090 (0.421)	-0.246 (0.378)	0.336 (0.502)	-0.163 (0.165)	-0.217 (0.164)	0.054 (0.165)
In District	255 Days	-0.152 (0.297)	-0.148 (0.317)	-0.004 (0.390)	-0.011 (0.133)	-0.153 (0.114)	0.143 (0.133)
District & Contributions	1 Days	-0.484 (0.715)	-0.209 (0.428)	-0.352 (0.812)	0.811 (0.488)	1.737 (0.769)	-0.925 (0.875)
District & Contributions	10 Days	-0.187 (0.925)	1.333 (1.365)	-0.705 (1.251)	0.037 (0.266)	0.375 (0.255)	-0.338 (0.316)
District & Contributions	25 Days	-0.134 (1.383)	0.731 (1.063)	-0.391 (1.664)	0.237 (0.287)	0.181 (0.278)	0.056 (0.182)
District & Contributions	140 Days	0.184 (0.691)	-0.671 (0.642)	0.924 (0.784)	-0.166 (0.166)	-0.203 (0.160)	0.037 (0.164)
District & Contributions	255 Days	0.734 (0.564)	-0.070 (0.554)	0.898 (0.657)	-0.035 (0.134)	-0.171 (0.108)	0.136 (0.135)
District & Lobbying	1 Day	0.535 (0.513)	-0.271 (0.399)	0.590 (0.726)	0.806 (0.487)	1.764 (0.767)	-0.958 (0.857)
District & Lobbying	10 Days	0.931 (1.045)	1.278 (1.033)	-0.676 (1.772)	0.035 (0.266)	0.376 (0.259)	-0.341 (0.315)
District & Lobbying	25 Days	0.516 (0.779)	0.290 (0.966)	-0.082 (1.200)	0.228 (0.289)	0.167 (0.283)	0.061 (0.177)

(Continued)

Table 4. (*Continued*)

Connection	Holding Period	Average Member Portfolio					
		Connected			Unconnected		
		Buys	Sells	L/S	Buys	Sells	L/S
District & Lobbying	140 Days	0.623 (0.479)	-0.224 (0.457)	0.842 (0.550)	-0.166 (0.165)	-0.187 (0.163)	0.021 (0.162)
District & Lobbying	255 Days	0.277 (0.389)	0.309 (0.373)	-0.043 (0.475)	-0.006 (0.137)	-0.172 (0.109)	0.166 (0.133)

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. See text for details on the definition of the connections.

that of a portfolio of local non-S&P 500 companies.¹⁸ 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*. Members' investments in widely covered local companies do just as well as their investments in relatively obscure local companies. This suggests that members benefit 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 are able to confer political benefits on companies in which they invest, 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 or influence regulators. In 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

¹⁸ Ivković and Weisbenner (2005) and Seasholes and Zhu (2010) similarly test whether individual investors excel in investing in local non-S&P 500 companies.

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 (0.04)	0.93 (0.06)	-0.16 (0.10)	0.95 (0.05)	1.09 (0.08)	-0.25 (0.10)
SMB_t	0.07 (0.07)	0.47 (0.10)	-0.32 (0.16)			
HML_t	0.14 (0.07)	0.26 (0.12)	0.19 (0.23)			
MOM_t	-0.19 (0.04)	-0.19 (0.09)	0.05 (0.13)			
Alpha	0.34 (0.11)	0.22 (0.20)	0.22 (0.35)	0.28 (0.14)	0.23 (0.24)	0.31 (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.

whether they serve on power committees¹⁹ and also seniority (using three equal sized bins for low, medium, and high seniority). Given the smaller sample sizes and fairly coarse measures of power we caution against drawing too strong conclusions from these subgroup tests, but the results are not supportive of the idea that the local premium is driven by the most powerful members. In fact, the excess return estimates on the hedged portfolios suggest that the local premium is, if anything, larger among members who do not serve on power committees and is fairly stable across levels of seniority.

¹⁹ Power committees in the House are defined as Rules, Appropriations, Ways and Means, and Commerce; in the Senate as Appropriations, Finance, and Commerce.

Table 6. Performance of local stocks by member group.

	Power Committee			Seniority		
	House	Senate	None	High	Medium	Low
Local Holdings						
$R_{m,t} - R_{f,t}$	0.77 (0.11)	0.74 (0.12)	1.06 (0.08)	1.04 (0.08)	0.76 (0.10)	0.87 (0.06)
SMB_t	0.28 (0.14)	0.30 (0.14)	0.26 (0.13)	0.26 (0.14)	0.24 (0.10)	0.41 (0.12)
HML_t	0.50 (0.12)	0.45 (0.20)	-0.06 (0.14)	0.15 (0.14)	0.17 (0.09)	0.45 (0.14)
MOM_t	-0.25 (0.11)	-0.15 (0.10)	-0.22 (0.08)	-0.26 (0.08)	-0.17 (0.09)	-0.17 (0.06)
Alpha	-0.02 (0.23)	0.15 (0.25)	0.43 (0.22)	0.43 (0.23)	0.14 (0.16)	0.14 (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 (0.05)	0.98 (0.03)	0.93 (0.04)	0.90 (0.06)	0.89 (0.05)	0.93 (0.03)
SMB_t	0.17 (0.07)	-0.00 (0.07)	0.05 (0.06)	0.05 (0.08)	0.16 (0.06)	0.03 (0.05)
HML_t	0.21 (0.07)	0.00 (0.06)	0.23 (0.06)	0.07 (0.08)	0.22 (0.07)	0.25 (0.05)
MOM_t	-0.25 (0.05)	-0.07 (0.04)	-0.15 (0.05)	-0.15 (0.05)	-0.15 (0.04)	-0.23 (0.04)
Alpha	-0.19 (0.12)	-0.10 (0.12)	-0.29 (0.11)	-0.26 (0.12)	-0.20 (0.11)	-0.22 (0.10)
N	6718	2491	8820	5540	6992	5497
Annualized Alpha	-2.28	-1.2	-3.48	-3.12	-2.4	-2.64

(Continued)

Table 6. (*Continued*)

	Power Committee			Seniority		
	House	Senate	None	High	Medium	Low
Long/Short						
$R_{m,t} - R_{f,t}$	-0.14 (0.18)	-0.21 (0.13)	0.10 (0.12)	0.09 (0.08)	-0.17 (0.14)	-0.06 (0.08)
SMB _t	0.29 (0.18)	0.30 (0.15)	0.13 (0.17)	0.35 (0.15)	0.08 (0.16)	0.31 (0.14)
HML _t	0.16 (0.17)	0.42 (0.20)	-0.27 (0.21)	0.02 (0.15)	0.01 (0.14)	0.05 (0.17)
MOM _t	0.04 (0.08)	-0.10 (0.10)	-0.06 (0.10)	-0.14 (0.08)	-0.05 (0.10)	0.14 (0.07)
Alpha	0.12 (0.27)	0.36 (0.27)	0.73 (0.27)	0.57 (0.25)	0.43 (0.23)	0.45 (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. Rogers standard errors (clustered by month) are provided in parenthesis. See text for details.

We also consider the possibility that the local premium we find is an artifact of sample selection. 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 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 thus 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.

Taken together, these additional findings point toward an interpretation of the local premium we find. The absence of savvy timing in members' local trades 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 stability of the local advantage that 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 suggest 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.

5 Discussion

A common tenet in the political economy literature is that firms and politicians benefit financially from exchange relationships. Several studies have shown that politically connected firms often benefit from relationships with politicians, whether through higher stock market valuations or better access to procurement contracts (Roberts, 1990; Fisman, 2001; Johnson and Mitton, 2003; Khwaja and Mian, 2005; Faccio, 2006; Jayachandran, 2006; Goldman *et al.*, 2009; Ferguson and Voth, 2008). Another set of studies has demonstrated that legislators, too, can benefit financially from ties to business interests, either through bribes or post-office rewards such as lucrative consultancies or directorships on corporate boards (Diermeier *et al.*, 2005; Dal Bò *et al.*, 2006; Eggers and Hainmueller, 2009; Lenz and Lim, 2010; Querubin and Snyder, 2013).

Given these findings we might expect that members of Congress, who acquire valuable insider information and have the political influence to

affect firm values, would profit from savvy stock investments. Previous academic studies (Ziobrowski *et al.*, 2004; Ziobrowski *et al.*, 2011) supported this expectation and a widely discussed book (Schweizer, 2011) highlighted instances in which politicians appeared to convert political power and knowledge into investing profits. However, Eggers and Hainmueller (2013) document that members' stock portfolios perform rather poorly and fail to match market indices in recent years. In this study we investigated the puzzle of why, despite their evident informational advantages and political influence, members of Congress have such a surprisingly poor investing performance. To this end we went beyond existing studies and examined whether and how members' political relationships to firms are reflected in their portfolios choices and investing performance.

We find that the overall mediocre performance cannot be explained by the fact that members hold plain-vanilla portfolios like other investors. In fact, we find that, conditional on member and firm fixed effects, members of Congress substantially skew their portfolio allocations toward firms that are headquartered in their home districts and firms that provide them with PAC contributions. The finding that members invest heavily in local firms and contributors could be consistent with several explanations, including some that would help account for their poor overall performance; it could be, for example, that members simply invest in firms with which they have some familiarity due to their political interactions, or that they invest in these firms in order to cement political relationships and not for financial reasons. We also find, however, that members' investments in politically connected firms outperform their non-connected investments, with investments in local companies performing especially strongly and handily beating the market, which tends to cast doubt on the idea that members' investments perform poorly because of familiarity bias or political skew.

Further probing the sources of members' superior local performance, we find suggestive evidence that members' information advantage emerges from general knowledge about the quality of local firms rather than more nefarious channels (such as stock tipping, trading on political inside information, or giving preferential political treatment to portfolio companies): the high local returns do not seem to result from well-timed trades, nor are they concentrated among more powerful members.²⁰

²⁰ We stress that there are several alternative explanations for the local advantage that are not ruled out by our analysis, some of which indeed rely on more nefarious channels. For example,

In response to the puzzle of why the consummate political insiders fail to beat the market, then, we are able to rule out the possible explanation that their portfolios are unrelated to members' political activities. It also does not seem to be the case that their portfolios perform poorly because they are *too* political. In fact, the surprising explanation for poor overall performance appears to be that members do not invest sufficiently in local companies and other companies to which they are politically connected. Their politically unconnected investments perform below market benchmarks, probably due to overconfidence, trend chasing, and the other usual failings of individual investors (Odean, 1999; Barber and Odean, 2000; Barberis and Thaler, 2003; Barber *et al.*, 2009; Hoechle *et al.*, 2009). Their politically connected investments do better (particularly their local investments), but these investments constitute a sufficiently small portion of their portfolios that the overall performance remains poor.

While we can thus discount some explanations for mediocre overall investment performance in Congress and emphasize others, our analysis leaves some open questions. One such question is why members of Congress do not invest more heavily in local companies and thus take advantage of the one area in which they appear to have an evident informational advantage. A possible explanation is that doing so would be financially unwise: even if they could obtain higher expected financial returns by investing more in local companies, they may incur undesirable risk — particularly because their own job security is likely to be positively correlated with the success of local firms. Another explanation is that they are constrained by ethical and political considerations. As suggested by the furor over Schweizer (2011), the public objects to the appearance of political insider trading, and for most members of Congress obtaining a marginally better expected investment return is probably not worth the risk of inviting public criticism. We hope this research will stimulate future work that can help to distinguish between these possible explanations.

members may use forms of political power that are not correlated with the power committee or seniority distinction, or they may receive and act on insider information well in advance of the public release of that information (which would make it difficult to detect the use of that information by analyzing transaction-based portfolios).

References

- Barber, B. M. and T. Odean. 2000. "Trading Is Hazardous to Your Wealth: The Common Stock Investment Performance of Individual Investors." *The Journal of Finance* 55(2): 773–806.
- Barber, B. M., Y. T. Lee, Y. J. Liu, and T. Odean. 2009. "Just How Much Do Individual Investors Lose by Trading?" *Review of Financial Studies* 22(2): 609–632.
- Barberis, N. and R. Thaler. 2003. "A Survey of Behavioral Finance." *Handbook of the Economics of Finance* 1: 1053–1128.
- Carhart, M. M. 1997. "On Persistence in Mutual Fund Performance." *Journal of Finance*, pp. 57–82.
- Cohen, L., A. Frazzini, and C. Malloy. 2008. "The Small World of Investing: Board Connections and Mutual Fund Returns." *Journal of Political Economy* 116(5): 951–979.
- Coval, J. D. and T. J. Moskowitz. 1999. "Home Bias at Home: Local Equity Preference in Domestic Portfolios." *Journal of Finance*, pp. 2045–2073.
- Coval, J. D. and T. J. Moskowitz. 2001. "The Geography of Investment: Informed Trading and Asset Prices." *Journal of Political Economy* 109(4): 811–841.
- Dal Bò, E., P. Dal Bò and R. Di Tella. 2006. "'Plata O Plomo?': Bribe and Punishment in a Theory of Political Influence." *The American Political Science Review* 100(1): 41–53.
- Diermeier, D., M. Keane, and A. Merlo. 2005. "A Political Economy Model of Congressional Careers." *American Economic Review* 95(1): 347–373.
- Eggers, A. and J. Hainmueller. 2013. "Capitol Losses: The Mediocre Performance of Congressional Stock Portfolios." *The Journal of Politics* 75(2): 535–551.
- Eggers, A. C. and J. Hainmueller. 2009. "MPs For Sale? Returns to Office in Postwar British Politics." *American Political Science Review* 103(04): 513–533.
- Faccio, M. 2006. "Politically Connected Firms." *American Economic Review* 96(1): 369–386.
- Ferguson, T. and H. J. Voth. 2008. "Betting on Hitler — The Value of Political Connections in Nazi Germany." *Quarterly Journal of Economics* 123(1): 101–137.
- Fisman, R. 2001. "Estimating the Value of Political Connections." *American Economic Review* 91(4): 1095–1102.
- Fung, W., D. A. Hsieh, N. Y. Naik, and T. Ramadorai. 2008. "Hedge Funds: Performance, Risk, and Capital Formation." *The Journal of Finance* 63(4): 1777–1803.
- Goldman, E., J. Rocholl, and J. So. 2009. "Do Politically Connected Boards Affect Firm Value?" *Review of Financial Studies* 22(6): 2331–2360.
- Heath, C. and A. Tversky. 1991. "Preference and Belief: Ambiguity and Competence in Choice Under Uncertainty." *Journal of Risk and Uncertainty* 4(1): 5–28.
- Hoechle, D., M. Schmid, and H. Zimmermann. 2009. "A Generalization of the Calendar Time Portfolio Approach and the Performance of Private Investors." *WWZ Working Paper*.
- Hölmstrom, B. 1979. "Moral Hazard and Observability." *The Bell Journal of Economics*, pp. 74–91.
- Huberman, G. 2001. "Familiarity Breeds Investment." *Review of Financial Studies* 14(3): 659.
- Ivković, Z. and S. Weisbenner. 2005. "Local Does as Local Is: Information Content of the Geography of Individual Investors' Common Stock Investments." *The Journal of Finance* 60(1): 267–306.
- Jayachandran, S. 2006. "The Jeffords Effect." *The Journal of Law and Economics* 49(2): 397–425.
- Jeng, L. A., A. Metrick, and R. Zeckhauser. 2003. "Estimating the Returns to Insider Trading: A Performance-Evaluation Perspective." *Review of Economics and Statistics* 85(2): 453–471.
- Jensen, M. C. and W. H. Meckling. 1976. "Theory of the Firm: Managerial Behavior, Agency Costs and Ownership Structure." *Journal of Financial Economics* 3(4): 305–360.

- Johnson, S. and T. Mitton. 2003. "Cronyism and Capital Controls: Evidence from Malaysia." *Journal of Financial Economics* 67(2): 351–382.
- Khwaja, A. I. and A. Mian. 2005. "Do Lenders Favor Politically Connected Firms? Rent Provision in an Emerging Financial Market." *The Quarterly Journal of Economics* 120(4): 1371–1411.
- King, D. C. 1994. "The Nature of Congressional Committee Jurisdictions." *American Political Science Review*, pp. 48–62.
- Kroszner, R. S. and T. Stratmann. 2005. "Corporate Campaign Contributions, Repeat Giving, and the Rewards to Legislator Reputation." *The Journal of Law and Economics* 48(1): 41–71.
- Lenz, G. and K. Lim. 2010. "Getting Rich (er) in Office? Corruption and Wealth Accumulation in Congress."
- McCarty, N. and L. Rothenberg. 1996. "Commitment and the Campaign Contributions Contract." *American Journal of Political Science* 40: 872–904.
- Myers, B. W. 2007. "Firms, Politicians, and Capital Structure." Job Market Paper.
- Odean, T. 1999. "Do Investors Trade Too Much?" *American Economic Review* 89(5): 1279–1298.
- Querubin, P. and J. M. Snyder. 2013. "The Control of Politicians in Normal Times and Times of Crisis: Wealth Accumulation by U. S. Congressmen, 1850–1880." *Quarterly Journal of Political Science* 8(4): 409–450.
- Roberts, B. E. 1990. "A Dead Senator Tells No Lies: Seniority and the Distribution of Federal Benefits." *American Journal of Political Science* 34(1): 31–58.
- Schweizer, P. 2011. *Throw Them All Out: How Politicians and Their Friends Get Rich Off Insider Stock Tips, Land Deals, and Cronyism That Would Send the Rest of Us to Prison*. Houghton Mifflin Harcourt (HMH).
- Seasholes, M. S. and N. Zhu. 2010. "Is there Information in the Local Portfolio Choices of Individuals?" *Journal of Finance* 65(5): 1987–2010.
- Tahoun, A. 2014. "The Role of Stock Ownership by US Members of Congress on the Market for Political Favors." *Journal of Financial Economics* 111(1). <http://www.sciencedirect.com/science/article/pii/S0304405X13002705>
- Ziobrowski, A. J., J. W. Boyd, P. Cheng, and B. J. Ziobrowski. 2011. "Abnormal Returns From the Common Stock Investments of Members of the US House of Representatives." *Business and Politics* 13(1): 4.
- Ziobrowski, A. J., P. Cheng, J. W. Boyd, and B. J. Ziobrowski. 2004. "Abnormal Returns from the Common Stock Investments of the US Senate." *Journal of Financial and Quantitative Analysis* 39(4): 661–676.