Political Capital: The (Mostly) Mediocre Performance of Congressional Stock Portfolios, 2004-2008

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We examine stock portfolios held by members of Congress between 2004 and 2008. The average investor in Congress underperformed the market by 2-3% annually during this period, a finding that contrasts with earlier research showing uncanny timing in Congressional trades during the 1990s. Members invested disproportionately in local companies and campaign contributors, and these "political" investments outperformed the rest of their portfolios (local investments beat the market by 4% annually). Our findings suggest that informational advantages enjoyed by Congressmen as investors arise primarily from their relationships with local companies, and that widespread concerns about corrupt and self-serving investing behavior in Congress have been misplaced.

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I. Introduction

Do members of Congress enrich themselves by picking stocks based on privileged political information? There is substantial anecdotal evidence that they do. Senator Dick Durbin, for example, reportedly sold stocks in September of 2008 just after a closed-door meeting in which senior leaders of the Federal Reserve and Treasury Department told Durbin and other Congressional leaders that the developing financial crisis was more serious than widely understood.[1] Consistent with such anecdotes, Ziobrowski et al. (2004) found that Senators' stock trades in the 1990s showed uncanny timing, concluding that Senators took advantage of a "definite informational advantage" over other investors; Ziobrowski et al. (2011) reports similar findings for members of the House between 1985 and 2001.

While existing studies have attracted substantial attention both in the media and in Congress itself,[2] questions remain that suggest the need for further research on Congressional investing. Most obviously, the analysis in Ziobrowski et al. (2004) and Ziobrowski et al. (2011) is based on data that is over a decade old, leaving open the question of how Congressional investing may have changed over time. Further, these studies test for political "insider trading" by examining members' stock transactions, but they ignore stock holdings and thus cannot measure the performance of the portfolios themselves (which would provide the best indication of the financial advantage enjoyed by members of Congress). Finally, existing studies compare the performance of the stock transactions of different types of Congressional investors (e.g. Republicans vs. Democrats), but they do not assess

[1] James Rowley. "Durbin Invests With Buffett After Funds Sale Amid Market Plunge." *Bloomberg*. June 13, 2009. Other anecdotal evidence appears in Joy Ward, "Taking Stock in Congress", *Mother Jones*, Sept./Oct. 1995, and Brody Mullins, Tom McGinty, and Jason Zweig, "Congressional Staffers Gain From Trading in Stocks," *Wall Street Journal*, October 11, 2010.

[2] Articles and broadcasts citing Ziobrowski et al. (2004) include *The New Yorker*'s "Financial Page" of October 31, 2005; "An Ethics Quagmire: Senators Beat the Stock Market – and Get Rich — With Insider Information," *Washington Spectator* January 1, 2006; "Nieman Watchdog – Questions the press should ask," March 10, 2006; R. Foster Winans, "Let Everyone Use What Wall Street Knows," *The New York Times*, March 13, 2007; NPR's *Marketplace* on September 17, 2009 (`http://marketplace.publicradio.org/display/web/2009/09/17/pm-inside-dope/`); Brody Mullins and Jason Zweig, "For Bill on Lawmaker Trading, Delay Is Long and Short of It", *The Wall Street Journal*, May 5, 2010; "Policy, portfolios and the investor lawmaker", *The Washington Post*, November 23, 2009. It was featured in testimony before the House Financial Services Committee in July of 2009 by Alan Ziobrowski (available at `http://www.house.gov/apps/list/hearing/financialsvcs_dem/ziobrowski_testimony.pdf`, accessed Sept. 8, 2010).

the performance of different types of *investments* (e.g. investments in local companies vs other investments), which suggests that there is more to learn about how Congressional investors take advantage of their political positions.

In this paper, we address these gaps by performing the most comprehensive study to date of the common stock investments of members of the U.S. Congress. Using financial disclosures filed between 2004 and 2008, we reconstruct the daily holdings of the 422 members of the House and Senate who reported owning U.S. stocks in this period. Our analysis of these portfolios focuses on three main questions: First, do Congressional portfolios perform well overall, compared to market benchmarks? Second, do members of Congress invest disproportionately in companies to which they are connected through their political roles? Third, how well do these connected investments perform compared to members' other investments?

Part of our motivation for taking up these questions is to contribute further evidence that could be used to help assess whether members of Congress unethically (or even illegally) convert their political positions into superior portfolio returns. The perception that they do so, fueled both by anecdotes and by Ziobrowski et al. (2004), has provoked the repeated introduction of legislation to forbid members from trading stocks on the basis of political "insider information,"[3] and the results of this paper should inform public debate on this issue.

Beyond assessing possible corrupt behavior in Congress, however, we believe that our analysis contributes to at least two broader lines of inquiry in political science. In examining whether members of Congress financially benefit from political information, we add to a growing political economy literature measuring the economic value of holding political office (Diermeier et al. 2005, Eggers & Hainmueller 2009, Lenz & Lim 2010, Querubin & Snyder 2011, Bhavnani 2011), which in turn informs a mostly theoretical literature about the

[3]The "Stop Trading on Congressional Knowledge" (STOCK) Act has been repeatedly introduced since 2006 by Reps Slaughter and Baird. It is currently legal for members of Congress to own stocks and to trade them based on political knowledge, but using one's political position for personal gain violates Congressional ethics rules. For more on policy issues surrounding stock trading by members of Congress, see George (2008) and Jerke (2010).

factors determining who enters politics (Caselli & Morelli 2004, Messner & Polborn 2004, Besley 2005). Our findings also provide suggestive insight into expertise in Congress. A number of scholars have asked whether and why members acquire expertise about policy issues (Krehbiel 1992, Mayhew 1974, Miquel & Snyder Jr 2006, Esterling 2007); others have looked at the ways in which members develop and communicate expertise about their districts (Fenno 1978, Cain et al. 1987). Our measures of portfolio performance speak not just to members' overall financial competence, but also to the question of how much members seem to know about economic conditions in their area of policy expertise (judged by investments in companies regulated by their committees) compared to how much they seem to know about economic conditions facing their constituents (judged by investments in companies headquartered in their districts).[4]

What we find is that, contrary to prior research and the popular view of politicians as being corrupt and savvy, members of Congress in recent years have been rather poor investors: the average Congressional portfolio underperformed the market index by 2-3% per year (before expenses) during the period we examine. In dollar terms, $100 invested in an index fund in January 2004 would have yielded $80 by the end of 2008; the same $100 invested like the average investor in Congress would have yielded only about $70. We find underperformance using a variety of specifications and weighting approaches, and not just for Congress as a whole but separately for both the House and the Senate, Democrats and Republicans, members of power committees, and groups of members stratified by wealth, portfolio size, and turnover. We also carry out our analyses on individual members and confirm that member-level excess returns are distributed symmetrically and centered below zero, which further increases our confidence that the underperformance we find is a widespread pattern and not limited to a few outliers. Performance relative to the market was if anything slightly better in 2004-2006 than in 2007-2008, suggesting that on average

[4]Compared to existing work on members' policy expertise that relies on expert assessments (Miquel & Snyder Jr 2006), bill sponsorship (Wawro 2001), and transcripts of committee hearings (Esterling 2007), our approach (measuring the performance of stock portfolios) has the advantage of being relatively easy to objectively measure, but it of course has the potential disadvantage that, in order to perform well as an investor in Congress, one needs to both have knowledge and the willingness to act on it, possibly in contravention of ethics rules.

members of Congress did not capitalize on the unusually active role of the government in the economy during the latter period.

We next investigate the relationship between members' political positions and their investment decisions. Remarkably, we find that members invest about 16 times as much 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 & Weisbenner 2005) and over 10 times as much as that found for mutual fund managers (Coval & Moskowitz 1999).[5] Also intriguing is the fact that members of Congress invest about 5 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. The apparent "political" bias of members' investments raises the possibility that members of Congress invest in local companies and contributors in part to establish or maintain political relationships. In particular, a member may invest in local companies and potential contributors in order to convince them that he shares their regulatory goals, hoping that this would convince them to provide him with political and financial support in return. To the extent that these investments are made for political and not financial reasons, they may drag down the average performance of members' portfolios, which would help to explain the poor overall performance we observe.

What we find, however, is that members' connected investments actually *outperform* the rest of their portfolios. A portfolio of holdings where the company contributed money to the member's election campaigns performs as well as the market, as does a portfolio of holdings where the company lobbied the member's committee; most remarkably, a portfolio of holdings where the company is headquartered in the member's constituency robustly

[5]In Ivković & Weisbenner (2005), "local" means a radius of 250 miles; in Coval & 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 local bias we find could therefore reflect the fact that our definition of "local" is more restrictive.

outperforms the market by about 4.5% per year. This finding, like the overall underperformance just discussed, is robust to various specifications including estimating excess returns individually for each member, which yields a symmetric distribution of member-level excess returns clearly centered above zero. This finding appears all the more striking when we consider that recent studies have found that neither individual investors (Seasholes & Zhu 2009) nor mutual fund managers (Coval & Moskowitz 2001)[6] enjoy a performance premium on their local investments. The links between members of Congress and companies headquartered in their districts appear to be strong indeed, given that their investments in local companies (unlike those of professional money managers) outperform the market by a considerable amount.

We provide 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 examine instances where members traded local and non-local stocks, and find that local trades do not seem to have been better timed than other trades, based on the performance of traded stocks during various periods (one day, two weeks, and five weeks) following the trade. This suggests that the local premium we find is based not on stock tips or non-public legislative plans but rather on general but not-widely-shared knowledge of the quality of the management of local companies or the types of projects in which they are engaged.

Together, our findings present a nuanced but coherent view of Congressional investors. Members of Congress possess and take advantage of some market-relevant information, but only when investing in companies to which they are closely connected – especially those companies that are headquartered in their districts. Members seem to recognize that they do better with connected companies, based on the fact that they invest disproportionately in these companies, but they fall short of the market benchmark overall because their non-connected investments perform below market indices. It may be that they would invest even more heavily in local companies if they did not fear political costs from carrying

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

too large an economic stake in local firms, although a combination of ignorance and risk aversion likely also play a role. Our findings on overall performance suggest that members of Congress fare about the same as run-of-the-mill individual investors, whose stock portfolios have repeatedly been shown to perform on average at or below market indices (Barber & Odean 2000, Barber et al. 2008).

While our analysis offers important answers about the nature and performance of Congressional stock portfolios over the last several years, it also raises questions that we cannot answer in this paper. Most importantly, it remains to explain why we find consistent underperformance across the Congressional portfolios while studies based on data from an earlier period find strong excess returns in the Senate (Ziobrowski et al. 2004) and House (Ziobrowski et al. 2011). Most of our findings are based on more comprehensive data than was analyzed in these papers (namely, our main analysis is based on actual positions held by members rather than a portfolio constructed solely from trades and an assumption about fixed holding periods), but the discrepancy persists when we perform their precise procedure using our data. The difference between our findings must therefore be the result of a reduction in the informational advantages of members of Congress between the period they study (1993-1998 in the Senate study and 1985-2001 in the House study) and the period we study (2004-2008), a decrease in members' willingness to act on these informational advantages (perhaps because of increased scrutiny applied to their investments, possibly due to these previous studies and the attention they garnered), or simply sampling variation.[7]

While we provide some evidence that speaks to the relative importance of these different possible accounts, we leave to future work the task of producing a detailed explanation of why members of Congress handily outperformed the market in the 1990s but not in the 2004-2008 period.[8]

[7]As we detail below, preparing the disclosure data for analysis requires significant preprocessing and cleaning so we cannot rule out that different cleaning approaches also contribute to the differences in the results.

[8]As a first step, future researchers will need to transcribe and clean portfolio data from the period studied by (Ziobrowski et al. 2004) and (Ziobrowski et al. 2011); the authors have so far refused to make their data available to other scholars for replication which makes it very costly to examine the robustness of the results of these studies.

After describing our data in the next section, we assess the overall performance of Congressional investors and subsets thereof, comparing this performance to that of other types of investors as well as the performance of members of Congress in the previous decade. We then divide members' portfolios according to connections between companies and members and assess how much members invest in connected companies, how well these investments perform, and what that suggests about members' interactions with firms to which they are politically connected. We then conclude by weighing some implications of our findings.

II. Data

Our study is based on common stock holdings and transactions reported by members of the U.S. Senate and House of Representatives between January 2004 and December 2008. As a result of the 1978 Ethics in Government Act, members of Congress are required to disclose their stock investments (as well as real estate and other investments, liabilities, and outside income and employment) and those of spouses and dependent children in annual filings known as Financial Disclosure Reports.[9] This paper is the product of using these reports to reconstruct members' actual portfolios and evaluating the performance of those portfolios using standard methods from empirical finance.

A. Reconstructing Portfolios from Disclosure Forms

Members of Congress are required to submit disclosure reports each spring, detailing their year-end holdings as well as all transactions made during the year. Since 2004 the Center for Responsive Politics (`www.opensecrets.org`) has transcribed the reports, and since 2008 they have made this data freely available. We thus received the data as a pair of spreadsheets, one with a row for each of the 111,101 transactions recorded and another with a row for each of the 169,828 year-end holdings recorded.

[9] Our analysis includes all holdings and trades reported by members, including those owned by spouses and dependent children. Members may also choose to create qualified blind trusts, which are managed on their behalf and whose holdings are unknown to the member. In our data 20 members report qualified blind trusts.

The first task in converting this raw data to stock portfolios was to identify the companies in which members hold stocks. The disclosure reports do not identify holdings in standardized ways (e.g. an investment in Bank of America common stock may be described as "Bank of America," "Bank America Common Stock," "Banc of America," or "BOA"); we used search utilities provided by Google Finance and the Center for Research on Security Prices (CRSP) as well as manual checks to link variously described assets to actual companies. Even more challenging, the descriptions may not precisely distinguish between stock holdings and other types of assets such as corporate bonds, mortgages, auto loans, or bank accounts. To reduce the risk of misclassifying savings accounts and other financial instruments as stock investments, we hand-checked the disclosure report for each apparent financial stock to attempt to distinguish stocks from other types of assets based on other clues in the forms, such as columns reporting dividend or investment income.[10]

The next task was to impute a dollar value for each holding and trade reported. The law requires only that members report the value of their investments in broad value bands (e.g. $15,000 – $50,000) rather than exact dollar amounts.[11] In order to impute precise values for investments reported in these bands, we took advantage of the fact that we do know the precise value of a sizable minority of reported investments — those cases in which a member submitted an annual statement from a bank or investment manager rather than filling out the official forms.[12] We used these investments to fit a distribution of precise values and, for each investment for which we know only the band, we impute the expected value of the precise-value distribution within that band.[13] For the highest band (investments over

[10]Between these checks and other manual checks, we estimate that we and our research assistants spent well over 250 combined hours cleaning and preparing the data for analysis.

[11]Value band cutpoints are at $1,000, $15,000, $50,000, $100,000, $250,000, $500,000, $1,000,000, $5,000,000, $10,000,000 and $25,000,000, and a top category captures all investments of $50,000,000 or more in value.

[12]This information is available for about 25% of the transactions in the dataset and about 8% of the year-end holdings. The members who reported exact values tended to have larger portfolio sizes overall, but there is no reason to think that within value bands the value of their assets and transactions would differ greatly from those of members who did not report exact values. Consistent with this, when we redo the imputation with a subset of members who report exact values and who are matched to members not reporting exact values, the imputed values differ hardly at all from those imputed based on the full sample of members who report exact values.

[13]This approach is inspired by the imputation method proposed in Milyo & Groseclose (1999).

$50,000,000), of which there are fewer than 100 holdings and 5 trades in our estimation sample, we impute the value of $50,000,000.

Having linked each holding and trade to a company and imputed dollar values, it remained to reconstruct the day-by-day stock portfolio. Our approach in reconstructing a portfolio from the disclosure reports was to start at the last day of each year, for which the reports provide the entire portfolio (i.e. the year-end holdings), and work backward to the beginning of the year, adjusting the portfolio each day to reflect purchases and sales as well as fluctuations in value due to security price changes. (In other words, each portfolio is rebalanced on a daily basis.[14]) For example, suppose a member reported holding $10,000 of stock in Company A at the end of the year and reported purchasing $5,000 of stock in Company A on June 1. This member's portfolio on January 1 of that year is estimated by calculating what $10,000 in Company A stock was worth on June 1 (based on the return between June 1 and the end of the year), subtracting $5,000, and then calculating what that value was worth on January 1. In this way we calculate dollar value holdings for every member of every stock on each day between January 1, 2004 and December 31, 2008.

B. A Glimpse at Congressional Portfolios

Our data covers disclosure reports from 650 members who served in the House and Senate between 2004 and 2008. Of these members, 422 reported holding a stock listed on NYSE, NASDAQ, or AMEX at some point during that period. Overall the dataset includes 29,778 reported end-of-year holdings and 48,309 reported transactions. A total of 2,581 companies are represented in the dataset; together these companies make up about 94% of the total capitalization of these three exchanges over our sample period.

Table 1 provides summary statistics describing the portfolios of the 422 members of Congress whose investments appear 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

[14]Barber & Odean (2000) show that ignoring intra-month timing of trades makes little difference in their overall return calculations, but we see no reason not to calculate daily returns, particularly given the short time-frame in which information arbitrage would likely take place.

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.[15] 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 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. The presence of a number of very large portfolios in the data suggests that conclusions about the performance of Congress as a whole will be sensitive to whether individual-level performances are weighted equally across members or by portfolio size. As described below, our analysis focuses on the average member-month, but we also provide estimates that weight by value and number of holdings; in the appendix, we also provide estimates of the return on aggregate portfolios that are either weighted equally across members or weighted by portfolio value.

III. Do Members Beat the Market?

We now turn to the task of assessing the performance of the common stock investments of members of Congress between 2004 and 2008.

A. Methods

To compare Congressional stock portfolios to the market benchmark, we adopt the standard calendar-time approach (e.g. Barber & 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 & Zhu (2009) (and in contrast to earlier work including Barber & Odean (2000) and Ziobrowski et al. (2004)) we carry out our main analysis via a panel

[15]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 negative news. 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.

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):

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

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. 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.[16] The intercept α in this panel regression is our estimate of the monthly average abnormal portfolio return across members; we also report estimates where we weight members by portfolio size and number of holdings. In order to account for the cross-sectional correlation in portfolio returns we compute robust standard errors clustered by month (see Seasholes & Zhu (2009)).

This approach is our preferred specification, but for the sake of robustness and comparability with previous studies we carry out a variety of specifications and weighting schemes and, because the findings from the various specifications are quite similar, we report the results in the appendix. We run the panel analysis using the CAPM model, which includes the market index as a single control. We also carry out all analyses with the approach employed by Barber & Odean (2000) and Ziobrowski et al. (2004), among others, which involves aggregating all individual portfolio returns up to a single time series and then running the Carhart Four-Factor or CAPM regression. In these aggregate analyses, we

[16] `http://mba.tuck.dartmouth.edu/pages/faculty/ken.french/data_library.html`

report results employing two approaches for aggregating member portfolio returns – one that weights each member equally and another that weights each member by her portfolio size. As shown in Hoechle et al. (2009) the panel approach on which we focus is numerically identical to the equal-weighted 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] The key point is that the findings from the various specifications we employ produce the same conclusions about the investing performance of members of Congress, which means that the reader can focus on the smaller set of main results we report.

B. Results: Overall Performance

Before looking at abnormal returns estimated by market models, we display in Figure 1 the cumulative raw returns for the average Congressional portfolio 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.[18] The average Congressional portfolio clearly does considerably worse than the market index: $100 invested in a market index (solid line) in January of 2004 would be worth about $80 by the end of 2008, whereas invested in the average Congressional portfolio (dotted line) it would be worth only around $69. The underperformance is clearly not limited to the bear market and stock market crash 2007 and 2008; at the market peak in 2007 the Congressional portfolio was already about 10% below the market on a cumulative basis since the start of 2004.

Models 1-4 of Table 2 provide our estimates of the abnormal returns. The results are consistent with the graphical analysis. Model 1 shows that over our study period, members on average underperformed the market about .23 percentage points per month ($p = .02$),

[17] The panel regression weights every investor-month equally, while the aggregated approach weights every month equally regardless of how many investors are present in each month. Standard errors also differ between the panel and aggregated approach depending on the intra-cluster correlation in the panel regression. See Hoechle et al. (2009) for a discussion.

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

which annualizes to a yearly abnormal return of about -2.8% with a .95 confidence interval of $[-4.9\%; -.5\%]$. This result is robust across various specifications. The poor performance is very similar when we use a random effects model with varying intercepts (model 2), weight the regression by the number of stock holdings per member-month (model 3), or weight the regression by the average value of the stock holdings per member-month (model 4). The overall returns are also similar when estimated with the CAPM model (Table A1, in the appendix) or the aggregated data regressions (Table A2).

C. Performance in Subgroups

Models 5-26 in Table 2 report the abnormal return estimates for relevant subsets of Congress. The monthly alpha estimates along with their .95 confidence interval are also visualized in Figure 2. The results indicate that the overall underperformance is very consistent across subgroups. Republicans do slightly better than Democrats (although the difference in intercepts is not quite significant at conventional levels ($p = .22$))[19] House members do slightly better than Senators, but again we do not reject the null of no difference. Members on power committees in the House or Senate[20] do slightly better than other members, but the differences are small and statistically insignificant. The estimated excess returns are also similar for the 2004-2006 period, when the market was rising, and the 2007-2008 period, when the market fell and the government began to intervene more heavily in the economy. There are also no consistent differences across the group of members when we stratify the sample by seniority, net worth, portfolio size (using three equal sized bins for low, medium, and high), or pre-congressional careers.[21] The best-performing subgroup appears to be members who owned businesses before entering Congress (who we estimate

[19] To test for the differences in intercepts we fit a pooled model with a group indicator (Democrat/Republican) and its interactions with all the controls. The main effect of the group indicator then identifies the differences in alpha returns (see Hoechle et al. (2009)).

[20] We define "power committees" in the House as Rules, Appropriations, Ways and Means, and Commerce; in the Senate they are Appropriations, Finance, and Commerce.

[21] We are grateful to Nick Carnes for providing us with the data on pre-congressional careers. A members is coded as belonging to a career category if she spent more than 60 % of her pre-congressional career in that category. The results are very similar if other cut-points are used. See Carnes (2010) for details on the career data.

beat the market by about .5% per year), but even this group does not outperform either the market or other investors at conventional levels.[22] The comparable subgroup analyses using the CAPM model (presented in table A1 in the appendix) and the aggregated data approach (table A2) similarly show consistent underperformance across subgroups.

The consistently negative results across subgroups indicates that our overall findings are not the artifact of a few exceptionally poor investors in Congress but rather reflects a broader underperformance across members. Notably, none of the 88 alphas we estimate (22 subgroups, each estimated four ways) is positive and significant, and only a handful of point estimates are above zero.

D. Member-Level Performance

In Figure 3 we display estimated excess returns for each member in our dataset: estimates of alpha from a separate Carhart four-factor regression for each member. (Names are plotted only for members with relatively high or low returns or portfolio values.) A box and whiskers plot on each axis depicts the marginal distributions (the line indicates the median, the edges of the box denote the interquartile range, and the whiskers indicate the 5th and 95th percentiles). Not surprisingly, the mean monthly excess return across members at -.24 is very close to the estimated excess return from Model 1 of Table 2 (-.23). The marginal distribution of returns is fairly symmetric and clearly centered below zero (the median is at -.17), again indicating that the average underperformance is not driven by outliers.

E. Performance in Context

While our finding that Congressional stock portfolios underperformed the market may be somewhat surprising based on the popular perception of politicians as savvy, well-connected, and possibly corrupt, it is consistent with a long line of empirical work documenting that even supposed investment experts do not reliably outperform market indices. An early example is Cowles (1933), who found that stock market forecasts and recommen-

[22] We can reject the null that former business owners earn lower returns that other members $p = .07$.

dations made by financial service firms, fire insurance companies, and the editor of the *Wall Street Journal* tended to perform no better than what would result from random chance. In fact, every set of recommendations he examined on average did slightly worse than the market.

Much subsequent research in empirical finance has examined the performance of professional fund managers, with debate focusing on whether there is evidence of any mutual fund manager consistently beating the market. Some papers fail to find any evidence of stock-picking ability among managers of active mutual funds (Gruber 1996); other papers find evidence of individual ability among certain mutual fund managers (Carhart 1997) or even the average mutual fund manager (Grinblatt & Titman 1989).

Several papers in recent years have documented that the portfolios of individual investors generally perform poorly (see, for example, Odean (1999), Barber & Odean (2000, 2007), Barber et al. (2008), Goetzmann & Kumar (2008).) A particularly interesting example is provided by Barber et al. (2008), who analyze all trades in Taiwan over the 1995-1999 period and document a large systematic transfer of wealth from generally-inept individual investors to savvier institutional investors. Stocks sold by individuals in this sample subsequently perform better than the stocks they purchase, while the opposite is true for stocks traded by institutional investors. The results suggest that in general the stock market is a place where informed institutions take advantage of uninformed and overconfident individuals, who would be better off relying on simple indexing. It appears based on our findings that, despite the advantages of their professional situation and large network of connections, members of Congress fare no better on average than the average member of the latter category.

To put our findings in perspective, we provide in Figure 4 a comparison of the excess return we find for members of Congress with similar findings for other subgroups of investors. Our finding suggests that members of Congress perform on par with individual investors and mutual fund managers, as measured in Barber & Odean (2000) and Carhart (1997), and below that of corporate insiders and hedge fund managers as found in Jeng

et al. (2003) and Fung et al. (2008).

F. Comparison to Ziobrowski et al. (2004)

As is clear in Figure 4 and noted above, our finding of weak overall performance contrasts sharply with a previous widely-discussed study by Ziobrowski et al. (2004), who find abnormal returns among traders in the Senate in the 1990s that to our knowledge exceed those of any documented investor group. One possible explanation for this discrepancy is the difference in the type of data and methods of analysis employed: our analysis to this point has focused on the portfolio positions of members of the House and Senate, while Ziobrowski et al. (2004)'s finding is based on an analysis of an aggregate portfolio constructed from trades made by members of the Senate. To make the most direct possible comparison, we now apply the method described in Ziobrowski et al. (2004) to our data, such that any remaining differences should be due to changes in circumstances between the period in which the Ziobrowski study was carried out and our own period of 2004-2008.

In particular, we ignore reported end-of-year holdings and construct three portfolios based on transactions only: a buy portfolio, which holds all stocks purchased by members of Congress for 255 days following the purchase date, a sell portfolio, which holds all stocks sold by members of Congress for 255 days following the sell date, and a hedged portfolio that holds the purchased stocks and sells short the sold stocks (buy less sell portfolio). Like Ziobrowski et al. (2004), we assign precise dollar values to trades using the midpoint of the value band specified on the disclosure report, with a top-code at $250,000. After constructing the transaction-based portfolio and calculating daily returns, we aggregate member returns up to the monthly level and construct a single value-weighted Congressional portfolio by combining member returns in proportion to their portfolio weight. We then estimate excess returns with the CAPM and Fama-French 3-Factor models.[23]

The last line of Figure 4 graphically depicts our alpha estimate for the Senate, which can be compared with the Ziobrowski et al. (2004) finding that appears on the top line. The full results for the estimated excess returns on the buy sample, the sell sample, and the hedged

[23]The Fama-French model is the Carhart 4-Factor model without the momentum term.

(long/short) portfolio under the CAPM and Fama-French model for all members, Senate, and House are provided in Table A4 in the appendix. The analysis provides no evidence of informed trading; none of the coefficients are statistically significant. In separate analysis (reported in Table A5), we carry out the same regressions on portfolios similarly built from transactions but applying our own procedure to assign precise dollar values within bands (as described above) and using not just 255-day holding periods but also 1-day, 10-day, 25-day, and 140-day holding periods. As Table A5 indicates, with some combinations of holding period, model, and weights we find evidence of good or bad trading acumen, but the overall results are consistent with the null of zero abnormal returns.

Why do our results differ from those of Ziobrowski et al. (2004)? One explanation is that circumstances may have changed between the 1990s and the 2004-2008 period we examine in a way that would explain why Senators had extremely good timing in the earlier period but not in the more recent one. One such possible change is that the informational advantages enjoyed by members of Congress compared to the rest of the market may have declined since the 1990s. It could be, for example, that the bull market of the 1990s provided more opportunities for members of Congress to benefit from stock tips (on IPOs, for instance) than did the relatively moribund and finally panic-stricken market of the period we examine, or perhaps "political intelligence" hedge funds now seize any arbitrage opportunities members might previously have been able to enjoy. On the other hand, the intensified involvement of the government in the financial sector and high overall market volatility in 2007 and 2008 would seem to have provided unusual opportunities for arbitrage. Another such change is that members of Congress may have become more reluctant to openly take advantage of whatever informational advantage they possess, perhaps partly as a result of heightened scrutiny due to Ziobrowski et al. (2004). Consistent with this explanation, Senator Barbara Boxer (who was one of the four most active traders in the Ziobrowski study) has since placed most of her assets in a qualified blind trust. (Two of the others left the Senate before our period and the other, John Warner, had unremarkable portfolio returns.) On the other hand, the number of Senators reporting trades and the

number of trades reported were both larger per year in our period than in the earlier period covered by the Ziobrowski et al study, which would suggest that members of Congress have not in fact become more concerned about public criticism of their investments.

Logically, the other possible explanation is that the extraordinary returns found by Ziobrowski were the result of chance rather than informational advantage, i.e. that members of Congress in the 1990s were neither better informed nor more willing to take advantage of their information than members of Congress in the period we examine, but rather had better luck. Type I error is of course always a possibility in quantitative work, meaning that even if the null hypothesis is true (i.e. that members' portfolios are no better than the market) the data will sometimes tell us that it is false. Similarly, even investors with no informational advantage will sometimes perform extremely well by pure luck.

It should also be noted that the findings of Ziobrowski et al. (2004) appear to depend on the performance of a few individuals, suggesting that any informational advantage members may have enjoyed was concentrated in a few members who may have since left the Senate or changed their investing behavior. Just four Senators account for nearly half of the trades in Ziobrowski et al, and the authors find abnormal returns only when examining the overall (value-weighted) Congressional portfolio, not when looking at the average member's portfolio. Further, the paper's subgroup analysis yields strikingly different returns for different subsets of the Senate, again suggesting that the performance of a small number of individuals may drive the result. This localized superior performance may itself be due to either luck or informational advantage, but the fact that it was localized suggests that our subsequent finding of unremarkable performance should be less surprising.

IV. Is the Congressional Portfolio Political?

Our evidence to this point has suggested that members of Congress perform no better than the average individual investor. We now turn to a more disaggregated look at Congressional investments to assess the extent to which portfolio choices and performance measures reflect political factors linking members and companies.

A. Connection Measures

We define three types of connections between politicians and companies in our dataset that reflect an attempt to capture important channels by which members and firms interact:

- **Constituency**: We obtained the location of each company's headquarters from Compustat and assigned this address to a Congressional District using an API provided by `GovTrack.us`; this allows us to label whether each stock holding involved a company in the owner's constituency.[24]

- **Contributions**: We collected PAC contribution data from the FEC[25] 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 between 2003 and 2008.

- **Committee Lobbying**: We collected data on lobbying from the Center for Responsive Politics (CRP) and linked 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 totalling $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 referred;[26] this gives us an indication, for each stock holding, of how closely linked the company's lobbying priorities are to the owner's committee responsibilities.

[24] For Senators, an investment is considered in-district if the company is headquartered in the Senator's state.

[25] Via `watchdog.net`.

[26] 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.

B. Portfolio Choice and Political Connections

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. (See Cohen et al. (2008) for another example of this kind of analysis.) In particular, we estimate a regression of the form

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

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.[27]

Table 3 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. We find a very strong skew in members' portfolio towards politically connected firms. 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 5. 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

[27]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.

and 42 times higher for companies that are connected by all three. Regressions 3-5 extend this analysis by using different measures of connection, based on a binary indicator for being above the median among a member's connected companies (3) or based on a measure using the company's share of all contributions or lobbying expenditures directed to the member or his committees (4 and 5). 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 there is a large political bias in members' portfolio choices: members place considerably larger bets in companies to which they are politically connected. The result is robust to using several additional definitions of connectedness, including different percentile- and rank-based cutoffs.[28]

One can imagine three possible explanations for the propensity of members to invest disproportionately in local and contributor companies. First, members may invest in these companies simply because they know them. This appears to be the case for average individual investors, who invest disproportionately in local stocks but do not seem to have any particular information advantage in choosing among them. The typical U.S. household has about 30% of its portfolio invested in stocks headquartered within a 250 mile radius of the family home, while on average only 12% of all firms (the market) are headquartered within the same radius (see Ivkovic & Weisbenner 2005; or Seasholes & Zhu 2009 for a recent review). But according to the most comprehensive study of local investing patterns (Seasholes & Zhu 2009), individual investors' local holdings do not seem to exhibit superior returns, suggesting that individuals choose these companies simply because of familiarity.

A second explanation is that members of Congress hold connected stocks for political reasons.[29] Members may invest in companies headquartered in their districts, or companies

[28]We have also replicated the analysis conditioning only on stocks that members actively choose to hold (following Cohen et al. (2008)) and obtain very similar results (full results are in Table A6 in the appendix). 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.

[29]A recent paper by Tahoun (2010) explores this phenomenon using a subset of the data.

from which they hope to receive campaign contributions, in order to make policy promises more credible: voters may be more likely to vote for a candidate, and corporate PACs may be more likely to contribute to a candidate, when the candidate has aligned his financial incentives with their own by buying stock and thus made it more likely that he will support legislation favorable to their interests.[30] If connected investments are made for political rather than financial reasons, we would not expect them to perform well.

A third explanation is that members hold connected stocks because they have valuable information about those companies' economic prospects, based perhaps on interactions with the company's managers or knowledge of upcoming legislation. Many members of Congress entered politics from business or local office, and arrive in Washington with extensive personal and business connections to companies headquartered in their districts. Once a member is in office, these local companies remain important constituents and possible sources of campaign funding. Companies from which members seek financial support similarly are often closely connected to the member. These connections often involve regular interactions between corporate executives and members of Congress at social and fundraising events, as well as frequent meetings between company lobbyists and Congressional staff, all of which may provide opportunities for the member to collect market-relevant information about these connected companies. The idea that such interpersonal connections may bring market advantages has been reinforced by Cohen et al. (2008), who find that mutual fund managers make larger bets on companies to which they are connected through educational ties and are also more successful in these connected investments. It could also be that companies that ask for members' legislative help (whether they are local companies, contributors, or companies whose industries are overseen by a member's committees) share information that members can use to make lucrative investments.

In order to distinguish among possible reasons for members' preference for the stocks of local companies and companies that contributed to their election campaigns, we now turn

[30]This reasoning requires that it is somehow difficult for members to liquidate their stock holdings in connected companies, and that members do not face too much political risk from legislating in the interests of companies in which they are invested.

to evaluating the performance of members' connected investments.

C. Portfolio Performance and Political Connections

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 where 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 the hedged (connected minus unconnected) portfolio. Finally, we carry out our panel regression on each of the three portfolios. (See Cohen et al. (2008) for a similar approach to assessing the role of company-investor connections in portfolio performance.) The connections we consider (and for which we report results in Table 4 and in Figure 6) include our main measures of constituency, contribution, and committee lobbying, as well as definition of lobbying and contributions based on percentile cutoffs and combinations of district and other connections.

The remarkable finding reported in Table 4 and Figure 6 is that for all definitions of connections, the connected portfolio outperforms the unconnected portfolio, such that the point estimates for the hedged portfolios are all positive. These abnormal returns on the hedged portfolio are statistically significant at conventional levels for all of the contributions and in-district connections, with alpha returns of about .16 to .18 for the contributor connections and about .48 to .57 for the in district connections. This strongly suggests that members do better when they invest in contributors and local firms. Most strikingly we find members soundly beat the market when they invested in companies headquartered in their home districts, with statistically significant excess returns of about .24 to .43 per month (which annualizes to about 3-5% per year). The size of the abnormal returns for local investments are increasing for companies that are both in-district and also gave contributions or lobbied a member's committees, which is consistent with the idea that each of these connections represents a means by which members acquire valuable information about companies. We have also replicated all of this analysis using both the Carhart Four-Factor and the CAPM model with the aggregated data and the results are

very similar (full results in table A7).

How robust is the finding for the performance premium on local stocks? For each of the local connections, Figure 7 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 robustly beats the market on the connected portfolio, 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.[31]

D. Discussion

What explains the advantage members appear to have in investing in companies to which they are politically connected (and especially 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; 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,

[31] We also computed returns on a passive portfolio of local stocks that were not chosen by members in their respective districts; the average alpha on these local-and-not-chosen stocks is almost exactly zero. Finally, for the contributions and lobbying connections we also considered the possibility that companies that generally gave more campaign contributions or lobbying outperformed other companies in this period. For example, the contributions-connected portfolio may have performed better not because of the specific relationships between the member and her contributor, but simply because companies that contribute generally did better than those that did not, and our member-firm connections merely pick up this overall pattern. To address this alternative explanation, we conducted the same analysis but define the connected portfolio as the set of all investments made by members in companies that gave contributions or reported lobbying to *any* member during our time period. (Investments in a particular firm are thus all defined as connected or not connected, depending on the firm's PAC contribution or lobbying total.) 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 (results are in Table A8 in the appendix).

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 in upcoming legislation. Third, 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 these channels, we employ two strategies to attempt to say more about which ones are more important.

First, we examined whether timing of trades appears to have been better for local companies than for non-local companies. (The results are reported in Table A9.) 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. What we find is that the local buy-minus-sell (i.e. hedged) portfolio appears to do 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 at shorter time horizons there is no evidence that the local trades were better timed. (If anything, the local trades were 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 examined 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 local companies that appeared in the S&P 500 at some point during our period (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. (Ivković & Weisbenner (2005) and Seasholes & Zhu (2009) similarly test whether individual investors excel in investing in local

non-S&P 500 companies.) The results, reported in Table A10, 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.

Together, these 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 that explain their advantage in investing in these companies. We speculate that members of Congress are able to make judgments about the quality of senior corporate management and other hard-to-observe characteristics of local and other connected firms by virtue of their extensive interactions with these firms in the course of campaigns and lobbying.

V. Conclusion

Our study of the investments of members of Congress has yielded two main findings that may appear somewhat at odds with one another. On one hand, our analysis indicates that members of Congress were mediocre investors during the 2004-2008 period that we examine, falling short of the market benchmark by 2-3% per year. This finding contrasts with previous studies of Congressional investments, which found large excess returns in analysis of trades made in previous decades in both the Senate and the House. On the other hand, we find that the politically-connected subset of members' portfolios outperformed the rest of their investments, and that members' investments in local companies handily outperformed the market. This finding is especially significant considering that there is no evidence of either individual investors or money managers outperforming the market in their

local investments in recent decades, which suggests either that members of Congress have particularly strong local knowledge or that their valuable knowledge comes particularly from political interactions with constituents.

We find the overall message to be consistent, however. Members of Congress are not investing geniuses. Most of what they know about political developments is probably quickly incorporated into asset prices, and many members likely recognize the possible political costs of trying to make money on whatever private political information they do possess. That their portfolios would perform only about as well as the average individual investor is therefore not entirely surprising. The one area where members of Congress are on average perhaps the most unusual compared to ordinary investors is in their extensive connections to local business leaders, who seek out their assistance with legislation and whose assistance they seek out for reelection. Our findings suggest that it is on these local investments, rather than investments in companies affected by legislation for which they have responsibility, that members are able to excel.

To those who are concerned about corruption and self-serving behavior in political institutions, this study should provide relatively reassuring evidence. Members do not do very well as investors overall, and while they do invest heavily in local companies and contributors, they neither invest heavily in companies that they are especially responsible for regulating, nor do these investments do particularly well. Their strong performance in investing in local companies seems to emerge from extensive general knowledge of these companies rather than from time-sensitive information about firm-specific or political events. These members' constituents should perhaps be pleased that their representatives seem to understand the local economy and interact closely with local leaders. Together, these results suggest that the main concern in most public discussion of Ziobrowski et al. (2004)'s finding, as well as in the STOCK Act – members' use of information about pending legislative activity to enrich themselves – was not a major factor in members' investment performance in the 2004-2008 period.

On the other hand, our study does not inspire much confidence about the average finan-

cial savvy of members of Congress, outside of the performance of their local investments (which after all constitute only about 6% of the average member's investments). Even considering the strong performance of members' local investments, they could have conserved their own wealth (about $2,000 per year for the median portfolio), and insulated themselves from ethical questions as well, by cashing in their stock holdings and buying passive index funds instead.

References

Barber, B., Lee, Y., Liu, Y. & Odean, T. (2008), 'Just how much do individual investors lose by trading?', *Review of Financial Studies* .

Barber, B. & Odean, T. (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. & Odean, T. (2007), 'All that glitters: The effect of attention and news on the buying behavior of individual and institutional investors', *Review of Financial Studies* .

Besley, T. (2005), 'Political Selection', *Journal of Economic Perspectives* **19**(3), 43–60.

Bhavnani, R. (2011), 'Corruption among india;s politicians: Evidence from unusual data'.

Cain, B., Ferejohn, J. & Fiorina, M. (1987), *The personal vote: Constituency service and electoral independence*, Harvard University Press.

Carhart, M. (1997), 'On persistence in mutual fund performance', *Journal of Finance* pp. 57–82.

Carnes, N. (2010), 'Congressional leadership and social status (class) dataset, v. 1.2 [computer file].', *Available from the author ¡carnes@princeton.edu¿* .

Caselli, F. & Morelli, M. (2004), 'Bad politicians', *Journal of Public Economics* **88**(3-4), 759–782.

Cohen, L., Frazzini, A. & Malloy, C. (2008), 'The small world of investing: Board connections and mutual fund returns', *Journal of Political Economy* **116**(5), 951–979.

Coval, J. & Moskowitz, T. (1999), 'Home bias at home: Local equity preference in domestic portfolios', *Journal of Finance* pp. 2045–2073.

Coval, J. & Moskowitz, T. (2001), 'The geography of investment: Informed trading and asset prices', *Journal of Political Economy* **109**(4), 811–841.

Cowles, A. (1933), 'Can stock market forecasters forecast?', *Econometrica: Journal of the Econometric Society* **1**(3), 309–324.

Diermeier, D., Keane, M. & Merlo, A. (2005), 'A Political Economy Model of Congressional Careers', *American Economic Review* **95**(1), 347–373.

Eggers, A. & Hainmueller, J. (2009), 'MPs for sale? Returns to office in postwar British politics', *American Political Science Review* **103**(04), 513–533.

Esterling, K. (2007), 'Buying expertise: Campaign contributions and attention to policy analysis in congressional committees', *American Political Science Review* **101**(01), 93–109.

Fenno, R. (1978), *Home style: House members in their districts*, Little, Brown Boston.

Fung, W., Hsieh, D., Naik, N. & Ramadorai, T. (2008), 'Hedge funds: performance, risk, and capital formation', *The Journal of Finance* **63**(4), 1777–1803.

George, A. (2008), 'Public (self)-service: Illegal trading on confidential congressional information', *Harvard Law & Policy Review* **2**, 161–172.

Goetzmann, W. & Kumar, A. (2008), 'Equity Portfolio Diversification', *Review of Finance* **12**(3), 433–463.

Grinblatt, M. & Titman, S. (1989), 'Mutual fund performance: An analysis of quarterly portfolio holdings', *Journal of Business* **62**(3), 393–416.

Gruber, M. (1996), 'Another puzzle: The growth in actively managed mutual funds', *Journal of finance* pp. 783–810.

Hoechle, D., Schmid, M. & Zimmermann, H. (2009), 'A generalization of the calendar time portfolio approach and the performance of private investors', *Working Paper University of Basel* .

Ivković, Z. & Weisbenner, S. (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.

Jeng, L., Metrick, A. & Zeckhauser, R. (2003), 'Estimating the returns to insider trading: A performance-evaluation perspective', *Review of Economics and Statistics* **85**(2), 453–471.

Jerke, B. (2010), 'Cashing in on Capitol Hill: Insider Trading and the Use of Political Intelligence for Profit', *U. Pa. L. Rev.* **158**, 1451–1523.

Krehbiel, K. (1992), *Information and legislative organization*, Univ of Michigan Pr.

Lenz, G. & Lim, K. (2010), 'Getting rich (er) in office? Corruption and wealth accumulation in Congress'.

Mayhew, D. (1974), *Congress: the electoral connection*, Vol. 26, Yale University Press.

Messner, M. & Polborn, M. (2004), 'Paying politicians', *Journal of Public Economics* **88**(12), 2423–2445.

Milyo, J. & Groseclose, T. (1999), 'The electoral effects of incumbent wealth', *Journal of Law and Economics* **42**(2), 699–722.

Miquel, G. & Snyder Jr, J. (2006), 'Legislative effectiveness and legislative careers', *Legislative Studies Quarterly* **31**(3), 347–381.

Odean, T. (1999), 'Do investors trade too much?', *American Economic Review* **89**(5), 1279–1298.

Querubin, P. & Snyder, J. (2011), 'Wealth accumulation by us congressmen, 1845-1875: Were the civil war years exceptional (ly good)?'.

Seasholes, M. & Zhu, N. (2009), 'Is there information in the local portfolio choices of individuals', *Journal of Finance, forthcoming* .

Tahoun, A. (2010), 'The Role of Stock Ownership by US Members of Congress on the Market for Political Favors'.

Wawro, G. (2001), *Legislative entrepreneurship in the US House of Representatives*, Univ of Michigan Pr.

Ziobrowski, A., Boyd, J., Cheng, P. & Ziobrowski, B. (2011), 'Abnormal returns from the common stock investments of members of the us house of representatives', *Business and Politics* **13**(1), 4.

Ziobrowski, A., Cheng, P., Boyd, J. & Ziobrowski, B. (2004), 'Abnormal Returns from the Common Stock Investments of the US Senate', *Journal of Financial and Quantitative Analysis* **39**(4), 661–676.

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: Alpha Returns for Stock Investments of Members of Congress 2004-2008

Dependent Variable	Risk-Adjusted Monthly Portfolio Return ($R_{i,t} - R_{f,t}$)												
Mean	-.39												
Model	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
					Party		Chamber		Power Committee			Period	
	All Members				Dems	Reps	House	Senate	House	Senate	None	2004-06	2007-08
$R_{m,t} - R_{f,t}$	0.90	0.90	0.96	0.90	0.89	0.91	0.89	0.94	0.85	0.92	0.93	0.97	0.87
	(0.03)	(0.03)	(0.02)	(0.03)	(0.04)	(0.04)	(0.04)	(0.03)	(0.05)	(0.04)	(0.03)	(0.06)	(0.03)
SMB_t	0.10	0.11	0.04	-0.01	0.15	0.07	0.10	0.14	0.19	0.04	0.06	0.03	-0.14
	(0.05)	(0.05)	(0.03)	(0.05)	(0.07)	(0.05)	(0.06)	(0.06)	(0.07)	(0.08)	(0.04)	(0.06)	(0.08)
HML_t	0.21	0.21	0.08	0.08	0.15	0.26	0.23	0.13	0.24	0.12	0.21	0.07	0.29
	(0.05)	(0.05)	(0.02)	(0.05)	(0.06)	(0.06)	(0.05)	(0.07)	(0.07)	(0.08)	(0.05)	(0.06)	(0.08)
MOM_t	-0.18	-0.18	-0.06	-0.08	-0.18	-0.19	-0.20	-0.11	-0.26	-0.08	-0.15	-0.05	-0.25
	(0.04)	(0.04)	(0.01)	(0.02)	(0.05)	(0.04)	(0.05)	(0.03)	(0.06)	(0.03)	(0.04)	(0.04)	(0.04)
Alpha	-0.23	-0.23	-0.20	-0.15	-0.30	-0.17	-0.26	-0.12	-0.26	-0.10	-0.24	-0.12	-0.28
	(0.09)	(0.12)	(0.04)	(0.08)	(0.12)	(0.10)	(0.10)	(0.11)	(0.13)	(0.13)	(0.09)	(0.11)	(0.14)
Obs	18,388	18,388	18,388	18,388	8,621	9,754	14,475	3,808	6,847	2,637	8,904	11,818	6,570
Annualized Alpha	-2.76	-2.76	-2.4	-1.8	-3.6	-2.04	-3.12	-1.44	-3.12	-1.2	-2.88	-1.44	-3.36

Model	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)	(23)	(24)	(25)	(26)
		Seniority			Portfolio Size			Net Worth			Pre-Congressional Career		
	Low	Medium	High	Low	Medium	High	Low	Medium	High	Business	Lawyer	Politician	Other
$R_{m,t} - R_{f,t}$	0.89	0.87	0.94	0.89	0.89	0.92	0.87	0.94	0.88	0.93	0.89	0.96	0.88
	(0.06)	(0.04)	(0.02)	(0.07)	(0.04)	(0.02)	(0.06)	(0.03)	(0.03)	(0.04)	(0.04)	(0.04)	(0.04)
SMB_t	0.08	0.16	0.05	0.13	0.17	0.02	0.17	0.07	0.09	0.09	0.28	0.04	0.08
	(0.07)	(0.05)	(0.05)	(0.07)	(0.07)	(0.03)	(0.08)	(0.05)	(0.05)	(0.08)	(0.08)	(0.09)	(0.05)
HML_t	0.09	0.23	0.28	0.28	0.20	0.16	0.20	0.19	0.23	0.19	0.36	0.17	0.18
	(0.07)	(0.06)	(0.05)	(0.08)	(0.07)	(0.04)	(0.08)	(0.05)	(0.05)	(0.08)	(0.09)	(0.09)	(0.05)
MOM_t	-0.16	-0.14	-0.24	-0.21	-0.23	-0.11	-0.28	-0.10	-0.18	-0.23	-0.11	-0.23	-0.18
	(0.05)	(0.04)	(0.03)	(0.06)	(0.05)	(0.02)	(0.06)	(0.04)	(0.02)	(0.05)	(0.05)	(0.06)	(0.04)
Alpha	-0.27	-0.22	-0.19	-0.15	-0.29	-0.24	-0.32	-0.13	-0.26	0.04	-0.34	-0.21	-0.23
	(0.12)	(0.11)	(0.09)	(0.15)	(0.12)	(0.05)	(0.15)	(0.10)	(0.08)	(0.16)	(0.15)	(0.17)	(0.09)
Obs	5,602	7,171	5,615	5,422	6,388	6,578	5,422	6,483	6,470	1,131	2,650	3,407	11,200
Annualized Alpha	-3.24	-2.64	-2.28	-1.8	-3.48	-2.88	-3.84	-1.56	-3.12	0.48	-4.08	-2.52	-2.76

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 $R_{i,t} - R_{f,t}$ (where $R_{f,t}$ is the risk-free return from Ken Frenchs website). Portfolios are based on information reported in end-of-year financial disclosure reports (see text for details). 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. Models 1-4 present the regression for the sample of all members, where model 1 is the raw regression, model 2 includes a random effect for member, model 3 is weighted by a member's number of monthly holdings, and model 4 is weighted by a member's average value of monthly holdings. Models 5-26 report regression results for selected subgroups of members. 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. Pre-congressional careers are classified based on Carnes (2010) into Business Owners, Lawyers, State or Local Politicians, and Other careers. A member is classified as belonging to an occupational category if he spent more then 60 % of his pre-congressional career in that category.

Table 3: 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	x	x	x	x	x
Firm Fixed Effects	x	x	x	x	x
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 4: Abnormal Returns for Stock Investments of Members of Congress in Politically Connected Firms 2004-2008

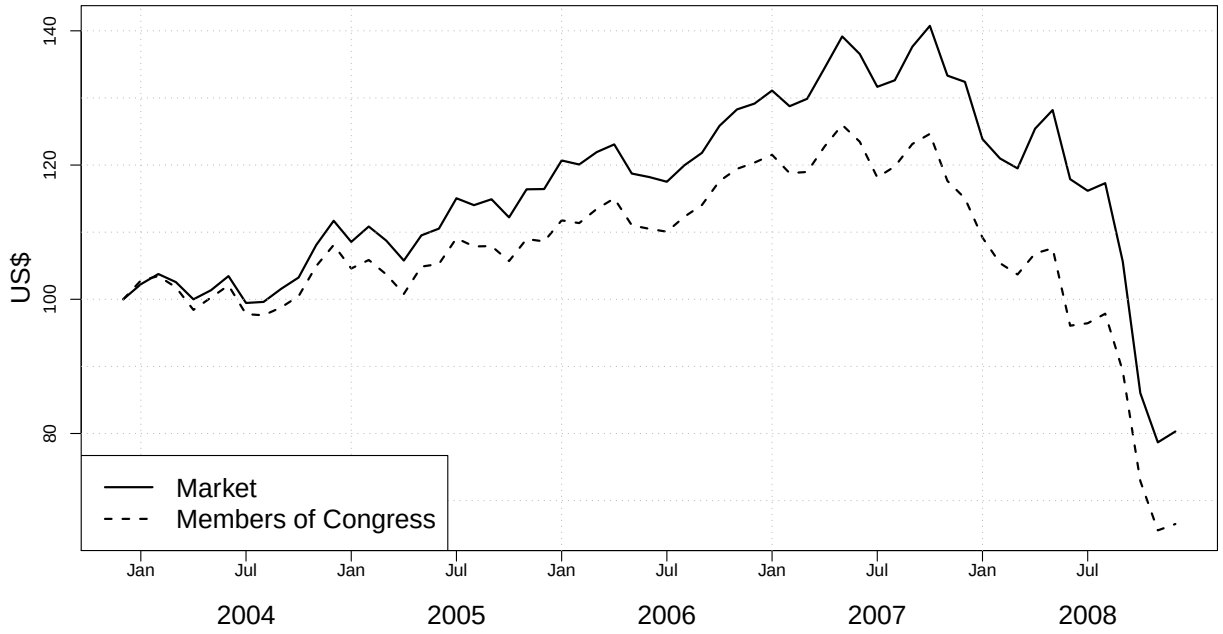
Model	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
		Lobbying (Any)			Lobbying (> p50)			Contributions (Any)			Contributions (> p50)		
	ALL	CON	UCON	L/S	CON	UCON	L/S	CON	UCON	L/S	CON	UCON	L/S
$R_{m,t} - R_{f,t}$	0.90	0.90	0.94	-0.10	0.88	0.93	-0.10	0.76	0.93	-0.15	0.73	0.92	-0.20
	(0.03)	(0.05)	(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.

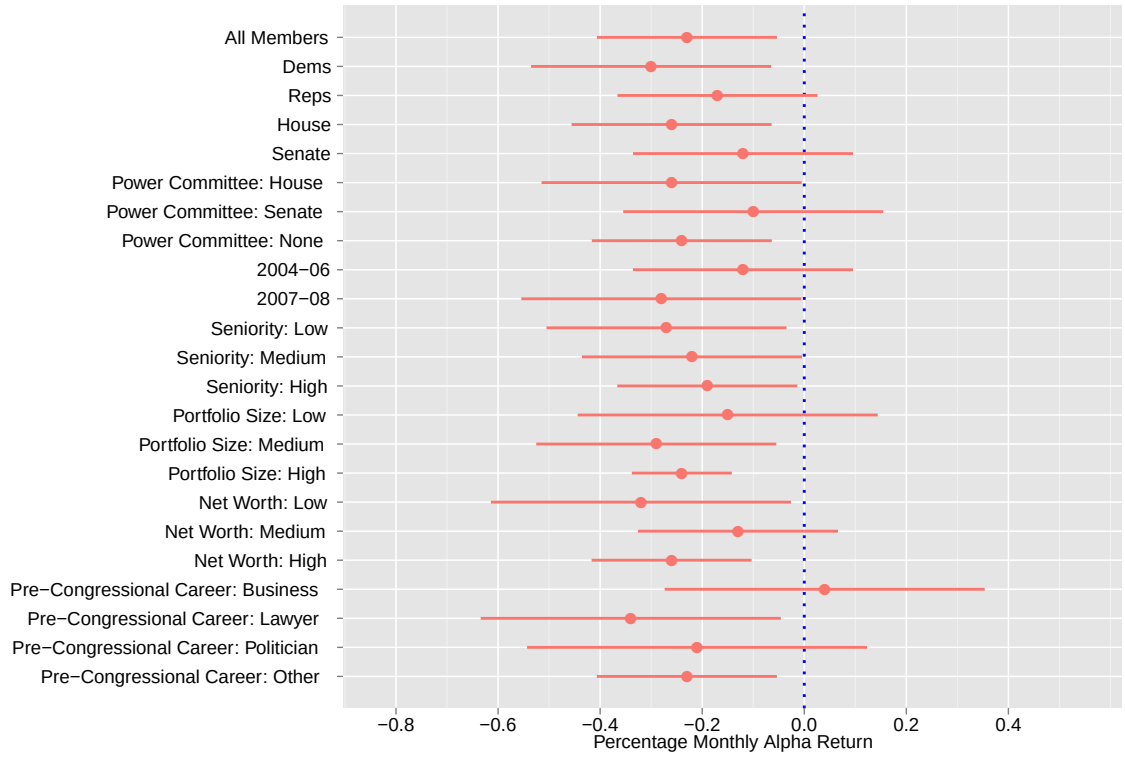
Figures

Figure 1: Cumulative Monthly Return for Aggregate Congressional Portfolio and the Average Congressional Member



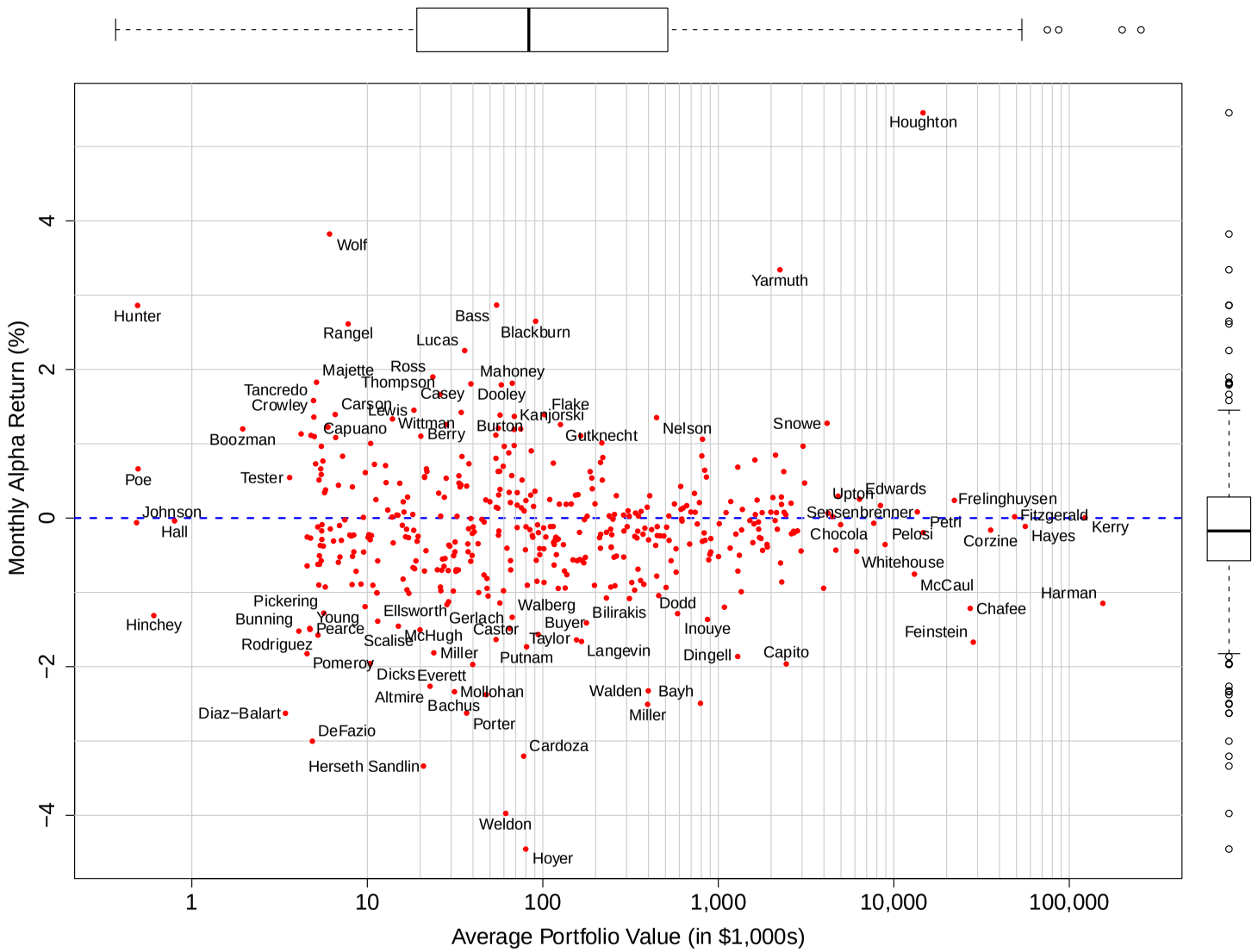
Note: Cumulative monthly return is shown for a $100 dollar position in the CRSP market index (a value-weighted index of stocks listed on the NYSE, AMEX, and NASDAQ) and the average Congressional portfolio beginning in January 2004. The average Congressional portfolio return is built by averaging monthly returns across members for each month.

Figure 2: Monthly Alpha Returns for Members of Congress



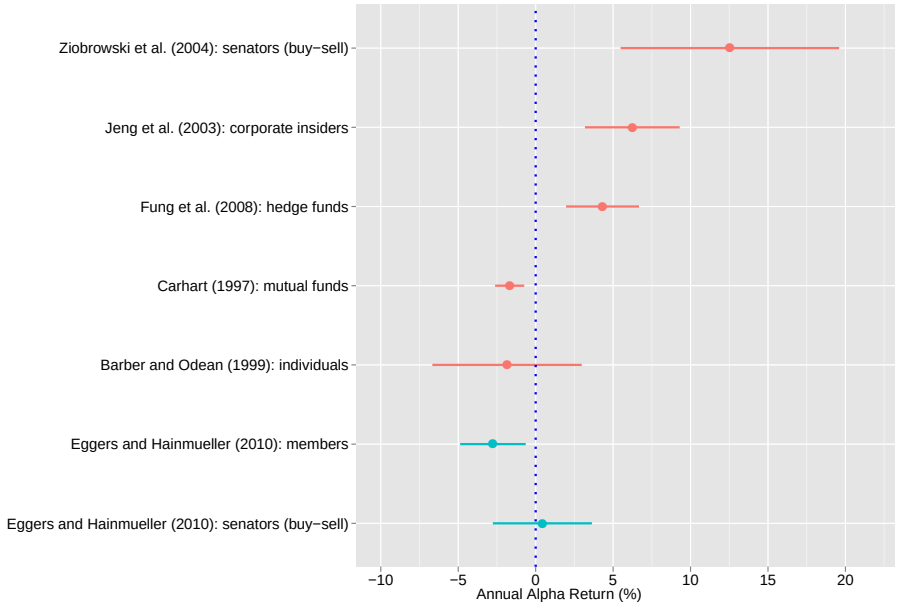
Note: Estimated monthly alpha returns (with .95 confidence intervals) of the holdings-based calendar-time portfolios of all members of Congress that report holding common stocks during the 2004-2008 period. Portfolios are based on information reported in end-of-year financial disclosure reports (see 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 $R_{i,t} - R_{f,t}$ (where $R_{f,t}$ is the risk-free return from Ken Frenchs website). 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). The first estimate is the alpha return for the sample of all members; the other estimates are for selected subgroups of members or time periods. 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. Pre-congressional careers are classified based on Carnes (2010) into Business Owners, Lawyers, State or Local Politicians, and Other careers. A member is classified as belonging to an occupational category if he spent more then 60 % of his pre-congressional career in that category.

Figure 3: Members' Monthly Excess Returns and Average Portfolio Size 2004-2008



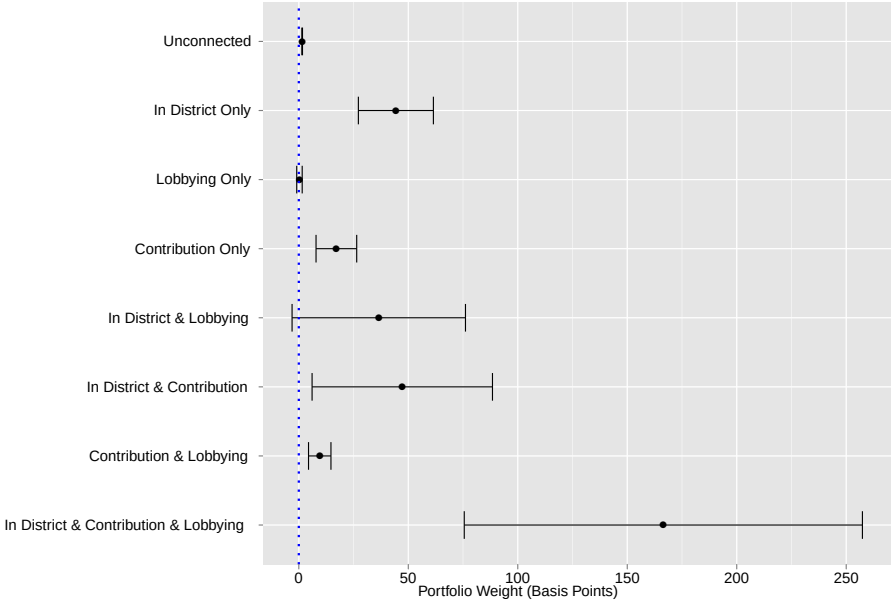
Note:
Monthly alpha return is Carhart 4-factor alpha obtained from a calendar time portfolio regression of each member's excess return on the Fama and French (1993) mimicking portfolios and the Carhart (1997) momentum factor. Members with large/small returns or large/small portfolios are highlighted with labels. Box plots on the right and on top show the marginal distribution of alpha returns and portfolio sizes across members: the thick line indicates the median, the edges of the box denote the interquartile range, and the whiskers indicate the 5th and 95th percentiles.

Figure 4: Benchmark Estimates for Different Investor Groups



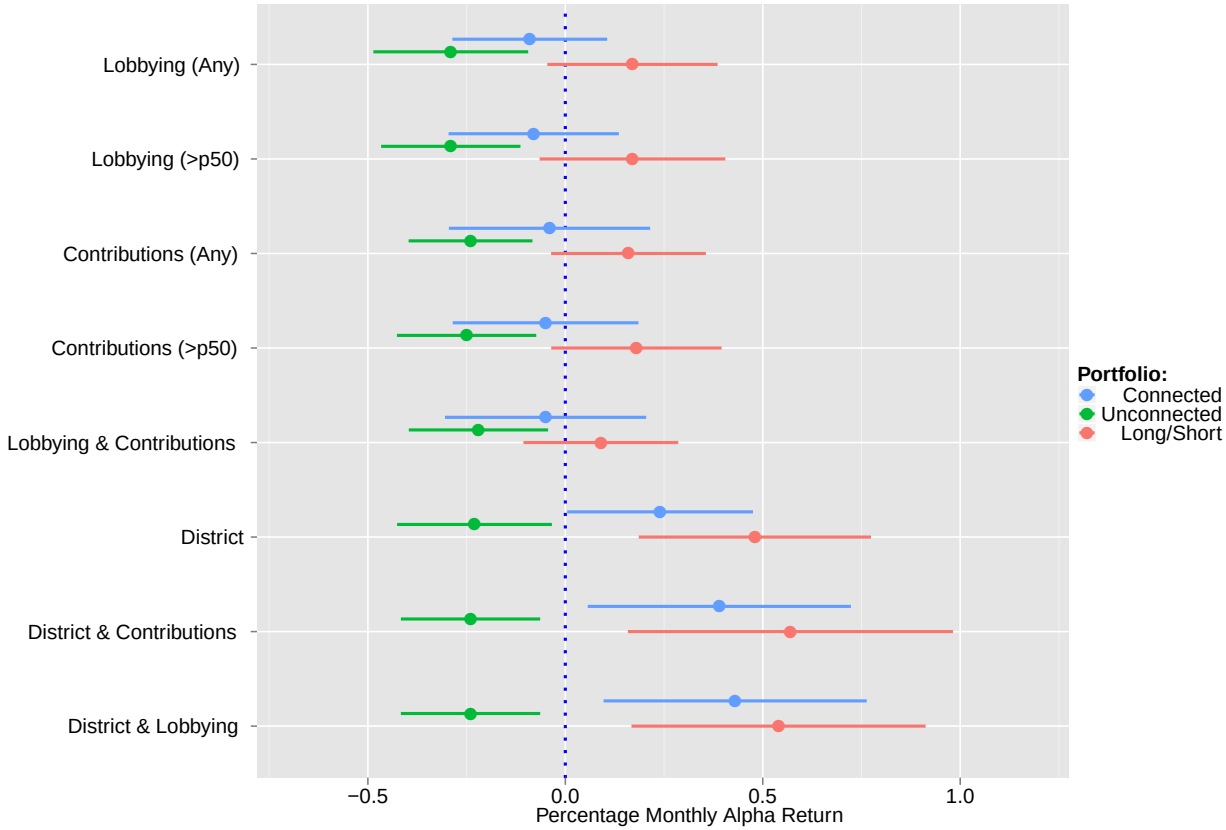
Note: Point estimates for annual alpha returns (with .95 confidence intervals) for different investor groups compiled from different studies. The last estimate refers to our replication of the Ziobrowksi et al. (2004) approach using our data for senators.

Figure 5: Portfolio Weights as a Function of Member-Firm Connections



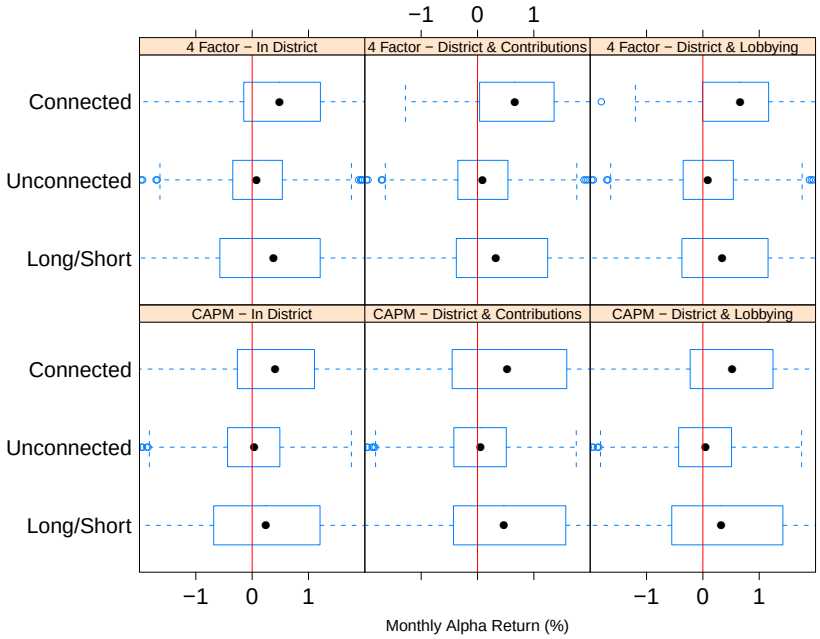
Note: Point estimates (with .95 confidence intervals) for average portfolio weights (in basis points) as a function of member-firm connections based on model 2 in Table 3.

Figure 6: Monthly Alpha 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 7: Distribution of Member Specific 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. 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.

A1 Alpha Returns From CAPM

Table A1 contains our replication of table 2 using the CAPM model.

Table A1 Excess Returns for Stock Investments of Members of Congress 2004-2008 estimated with CAPM

Dependent Variable	Risk-Adjusted Monthly Portfolio Return ($R_{i,t} - R_{f,t}$)												
Mean	-.39												
Model	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
					Party		Chamber		Power Committee			Period	
	All Members				Dems	Reps	House	Senate	House	Senate	None	2004-06	2007-08
$R_{m,t} - R_{f,t}$	0.96	0.96	0.98	0.90	0.96	0.96	0.95	1.00	0.94	0.95	0.98	0.96	0.92
	(0.05)	(0.05)	(0.02)	(0.04)	(0.04)	(0.06)	(0.05)	(0.05)	(0.07)	(0.05)	(0.04)	(0.03)	(0.06)
Alpha	-0.27	-0.27	-0.21	-0.18	-0.36	-0.18	-0.30	-0.14	-0.33	-0.11	-0.26	-0.06	-0.70
	(0.12)	(0.16)	(0.05)	(0.08)	(0.14)	(0.13)	(0.13)	(0.12)	(0.17)	(0.13)	(0.12)	(0.08)	(0.26)
Obs	18388	18388	18388	18388	8621	9754	14475	3808	6847	2637	8904	11818	6570
Annualized Alpha	-3.24	-3.24	-2.52	-2.16	-4.32	-2.16	-3.6	-1.68	-3.96	-1.32	-3.12	-0.72	-8.4
Model	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)	(23)	(24)	(25)	(26)
		Seniority			Portfolio Size			Net Worth			Pre-Congressional Career		
	Low	Medium	High	Low	Medium	High	Low	Medium	High	Business	Lawyer	Politician	Other
$R_{m,t} - R_{f,t}$	0.94	0.93	1.00	0.96	0.97	0.95	0.96	0.98	0.94	0.99	0.99	1.01	0.93
	(0.05)	(0.06)	(0.06)	(0.07)	(0.06)	(0.03)	(0.08)	(0.04)	(0.05)	(0.04)	(0.07)	(0.06)	(0.05)
Alpha	-0.33	-0.21	-0.26	-0.18	-0.35	-0.25	-0.42	-0.12	-0.29	-0.03	-0.26	-0.30	-0.28
	(0.13)	(0.13)	(0.16)	(0.18)	(0.15)	(0.08)	(0.19)	(0.11)	(0.12)	(0.19)	(0.19)	(0.17)	(0.12)
Obs	5602	7171	5615	5422	6388	6578	5422	6483	6470	1131	2650	3407	11200
Annualized Alpha	-3.96	-2.52	-3.12	-2.16	-4.2	-3	-5.04	-1.44	-3.48	-0.36	-3.12	-3.6	-3.36

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 $R_{i,t} - R_{f,t}$ (where $R_{f,t}$ is the risk-free return from Ken Frenchs website). Portfolios are based on information reported in end-of-year financial disclosure reports (see text for details). Controls are the market excess return ($R_{m,t} - R_{f,t}$). Rogers standard errors (clustered by month) are provided in parenthesis. Models 1-4 present the regression for the sample of all members, where model 1 is the raw regression, model 2 includes a random effect for member, model 3 is weighted by a member's number of monthly holdings, and model 4 is weighted by a member's average value of monthly holdings. Models 5-26 report regression results for selected subgroups of members. 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. Pre-congressional careers are classified based on Carnes (2010) into Business Owners, Lawyers, State or Local Politicians, and Other careers. A member is classified as belonging to an occupational category if he spent more then 60 % of his pre-congressional career in that category.

A2 Alpha Returns With Monthly Aggregated Data

Tables A2 and A3 replicate the analysis of Table 2 using aggregated data, as explained in the text. Briefly, in place of our panel regressions, which estimate the average alpha across members-months, we carry out regressions that model the average monthly return on a single portfolio that is created by aggregating member returns. For the Aggregate Congressional Portfolio the average monthly return is computed using a value-weighted average across members; for the Average Congressional Portfolio member returns are equal-weighted across members.

Table A2 provides the results of our estimates of the abnormal return on the Congressional portfolio. Panel A shows that the average monthly abnormal return for the aggregate Congressional portfolio is negative and significant at conventional levels in both the CAPM and Carhart 4-Factor specifications. The same is true for the the average Congressional portfolio shown in Panel B. The abnormal return estimates are very similar. For the CAPM, the magnitudes suggest that the aggregate Congressional portfolio underperforms the market by an average of about .27 percentage points per month, which annualizes to a yearly excess return of about -3.2% with a .95 confidence interval of $-5.5; -.95$; the average Congressional portfolio underperforms the market by an average of about .31 percentage points, which annualizes to a yearly excess return of about -3.8% $[-6.0; -1.5]$. The corresponding annualized figures for the 4-Factor model are -2.8% $[-5.2; -.5]$ and -3.1 % $[-5.1; -1.2]$.

Table A2: Alpha Returns for Aggregate/Average Congressional Portfolio

	Excess	Coefficient Estimate on:				Adjusted
	Return	$(R_{m,t} - R_{f,t})$	SMB_t	HML_t	MOM_t	R^2
Panel A: Gross Percentage Monthly Returns for Aggregate Congressional Portfolio						
CAPM	-0.269	0.925				0.96
	(0.095)	(0.038)				
Carhart 4-Factor	-0.239	0.920	-0.040	0.076	-0.065	0.96
	(0.099)	(0.037)	(0.053)	(0.055)	(0.037)	
Panel B: Gross Percentage Monthly Returns for the Average Member						
CAPM	-0.319	0.979				0.96
	(0.093)	(0.032)				
Carhart 4-Factor	-0.263	0.933	0.081	0.090	-0.125	0.98
	(0.080)	(0.025)	(0.042)	(0.042)	(0.030)	

Note: Table shows results from analysis using the monthly aggregate or average 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 obtained from aggregating the monthly portfolio returns across members. N=60. Panel A presents results for the gross monthly return on a portfolio that mimics the aggregate investments of all members of Congress (value-weighted). Panel B presents results for the gross return on a portfolio that mimics the investment of the average member of Congress (equal member weighted). CAPM is the result from a time-series regression of the member excess return on the market excess return $(R_{m,t} - R_{f,t})$. Carhart 4-factor is the result from a time-series regression of the member excess return on the Fama and French (1993) mimicking portfolios (the market excess return, a zero-investment size portfolio (SMB_t), a zero-investment book-to-market portfolio (HML_t)) and the Carhart (1997) momentum factor (MOM_t). Robust standard errors are presented in parentheses.

Table A3 reports the estimated abnormal returns across member subgroups using the aggregated data approach. The results are very similar to the results from the panel regression. The only noticeable exception is that the aggregate portfolio of prior business owners actually beats the market and the estimates are significant at conventional levels. Other than that all subgroups consistently underperform.

Table A3: Percentage Monthly Abnormal Return for Selected Subgroups

	Aggregate Portfolio Excess Return		Average Member Portfolio Excess Return	
	CAPM	4-Factor	CAPM	4-Factor
Democrats	-0.344	-0.304	-0.300	-0.225
	(0.122)	(0.126)	(0.143)	(0.118)
Republicans	-0.152	-0.163	-0.174	-0.107
	(0.143)	(0.139)	(0.156)	(0.105)
House	-0.212	-0.170	-0.272	-0.194
	(0.128)	(0.134)	(0.155)	(0.114)
Senate	-0.334	-0.336	-0.103	-0.081
	(0.122)	(0.129)	(0.128)	(0.121)
Power Committee House	-0.173	-0.088	-0.300	-0.184
	(0.146)	(0.144)	(0.223)	(0.149)
Power Committee Senate	-0.293	-0.248	-0.089	-0.069
	(0.139)	(0.134)	(0.095)	(0.105)
No Power Committee	-0.274	-0.309	-0.244	-0.196
	(0.117)	(0.142)	(0.110)	(0.080)
2004-2006	-0.172	-0.255	-0.188	-0.190
	(0.098)	(0.110)	(0.067)	(0.096)
2007-2008	-0.296	-0.216	-0.563	-0.329
	(0.178)	(0.222)	(0.196)	(0.161)
Seniority Low	-0.088	0.001	-0.313	-0.219
	(0.129)	(0.127)	(0.143)	(0.132)
Seniority Medium	-0.569	-0.625	-0.187	-0.159
	(0.150)	(0.167)	(0.150)	(0.115)
Seniority High	-0.273	-0.322	-0.211	-0.121
	(0.168)	(0.156)	(0.161)	(0.102)
Portfolio Size Low	-0.606	-0.518	-0.127	-0.058
	(0.230)	(0.229)	(0.202)	(0.162)
Portfolio Size Medium	-0.395	-0.405	-0.307	-0.219
	(0.114)	(0.121)	(0.171)	(0.132)
Portfolio Size High	-0.259	-0.243	-0.257	-0.211
	(0.095)	(0.097)	(0.090)	(0.055)
Net Worth Low	-0.643	-0.533	-0.312	-0.210
	(0.185)	(0.168)	(0.222)	(0.166)
Net Worth Medium	-0.270	-0.325	-0.100	-0.077
	(0.087)	(0.088)	(0.118)	(0.108)
Net Worth High	-0.272	-0.261	-0.277	-0.220
	(0.102)	(0.103)	(0.131)	(0.082)
Former Business Owners	0.467	0.532	-0.026	0.071
	(0.332)	(0.362)	(0.198)	(0.167)
Former Lawyers	-0.245	-0.405	-0.213	-0.286
	(0.231)	(0.239)	(0.186)	(0.150)
Former Local Politicians	-0.516	-0.451	-0.279	-0.142
	(0.173)	(0.203)	(0.176)	(0.167)
Other Pre-Congressional Careers	-0.223	-0.192	-0.246	-0.168
	(0.109)	(0.103)	(0.143)	(0.106)

Note: Alpha returns for selected subgroups with robust standard errors in parentheses. Aggregate returns/Average member returns are for portfolios that mimics the aggregate investments of all members/investments of the average member in a specific group respectively. Alpha returns from the CAPM are estimated with a time-series regression of the members' monthly excess return on the monthly market excess return. The Carhart 4-factor adds the Fama and French (1993) mimicking portfolios and the Carhart (1997) momentum factor as controls.

A4-A5 Alpha Returns from Transaction-Based Portfolio

Table A4 and A5 show monthly alpha returns for all members over the 2004-2008 period estimated from the transaction based calendar-time portfolios formed by mimicking the trades of all members of Congress that report holding common stocks during the 2004-2008 period. Calendar-time portfolios are formed based on stocks bought ("Buys"), and another portfolio based on stocks sold ("Sells"), and a third zero-cost portfolio that holds the portfolio of bought stocks and sells short the portfolio of sold stocks ("Long/Short"). Table A4 replicates the transaction-based portfolio returns for the value-weighted aggregate Congressional portfolios using the approach by Ziobrowski et al. (2004) where stocks are held in a calendar-time portfolio for a fixed holding period of 255 days and dollar values are imputed using band midpoints or a maximum value of $250,000 in the highest band. Table A5 contains the results for our analysis of the transaction-based portfolio returns for the average member and aggregated congressional portfolio for various fixed holding periods. Regardless of the approach used, we find that the trades of members of Congress are not particularly well-timed. These results are consistent with the holding-based analysis.

Table A4: Returns on Transaction-Based Portfolios
using Ziobrowski et. al approach

	Portfolio		
	Buys	Sells	Long/Short
All Members:			
CAPM Alpha	-0.127	-0.187	0.060
	(0.092)	(0.052)	(0.111)
Fama-French Alpha	-0.114	-0.211	0.097
	(0.081)	(0.048)	(0.083)
Senate:			
CAPM Alpha	-0.234	-0.251	0.016
	(0.106)	(0.089)	(0.144)
Fama-French Alpha	-0.248	-0.284	0.036
	(0.117)	(0.074)	(0.136)
House:			
CAPM Alpha	-0.083	-0.104	0.021
	(0.115)	(0.103)	(0.136)
Fama-French Alpha	-0.050	-0.118	0.068
	(0.079)	(0.097)	(0.101)

Note: Table shows results from analysis using the monthly value-weighted aggregate returns of the transaction-based calendar-time portfolios formed by mimicking the trades of all members of Congress that report holding common stocks during the 2004-2008 period. Following Ziobrowski et al. (2004) stocks are held held in a calendar-time portfolio for a fixed holding period of 255 days and dollar values are imputed using band midpoints or a maximum value of $250,000 in the highest band. Calendar-time portfolio are formed based on stocks bought ("Buys"), and another portfolio based on stocks sold ("Sells"), and a third zero-cost portfolio that holds the portfolio of bought stocks and sells short the portfolio of sold stocks ("Long/Short"). CAPM alpha is the result from a time-series regression of the portfolio excess return (i.e. raw return minus risk-free rate) on the market excess return. Fama-French alpha is the result from a time-series regression of the portfolio excess return on the three Fama and French (1993) mimicking portfolios.

Table A5: Monthly Alpha Returns on Transaction-Based Portfolio

	Holding	Aggregate Portfolio			Average Portfolio		
	Period	Buys	Sells	Long/Short	Buys	Sells	Long/Short
CAPM	1 Day	0.431	1.344	-0.913	0.805	1.215	-0.411
		(0.742)	(0.806)	(1.047)	(0.570)	(0.837)	(0.992)
Carhart 4 Factor		0.531	1.279	-0.749	0.849	1.195	-0.346
		(0.770)	(0.657)	(0.905)	(0.562)	(0.699)	(0.843)
CAPM	10 Days	-0.727	0.312	-1.039	-0.113	0.270	-0.383
		(0.540)	(0.263)	(0.603)	(0.201)	(0.183)	(0.208)
Carhart 4 Factor		-0.691	0.314	-1.005	-0.036	0.312	-0.348
		(0.535)	(0.253)	(0.629)	(0.235)	(0.160)	(0.213)
CAPM	25 Days	-0.352	0.134	-0.486	0.228	0.184	0.044
		(0.488)	(0.277)	(0.358)	(0.223)	(0.154)	(0.189)
Carhart 4 Factor		-0.320	0.161	-0.481	0.251	0.181	0.070
		(0.458)	(0.270)	(0.344)	(0.213)	(0.144)	(0.184)
CAPM	140 Days	-0.055	-0.220	0.165	-0.170	-0.163	-0.006
		(0.190)	(0.114)	(0.187)	(0.185)	(0.122)	(0.163)
Carhart 4 Factor		-0.025	-0.249	0.224	-0.169	-0.190	0.020
		(0.193)	(0.107)	(0.189)	(0.164)	(0.115)	(0.129)
CAPM	255 Days	-0.190	-0.098	-0.092	0.005	-0.111	0.116
		(0.144)	(0.085)	(0.169)	(0.184)	(0.122)	(0.139)
Carhart 4 Factor		-0.149	-0.141	-0.008	-0.017	-0.172	0.155
		(0.131)	(0.075)	(0.138)	(0.191)	(0.120)	(0.117)

Note: Monthly alpha returns (with robust standard errors in parenthesis) for calendar time portfolios that mimics the value-weighted and equal member weighted investments in stocks bought or sold by members over the 2004-2008 period. Results are reported for fixed holding periods of 1 day, 10 days, 25 days, 140 days, and 255 days. Within reported value bands, dollar values are imputed using the lognormal model as described in the main text. Long-short is the monthly average return of a zero cost portfolio that holds the portfolio of bought stocks and sells short the portfolio of sold stocks. CAPM alpha is the result from a time-series regression of the portfolio excess return (i.e. raw return minus risk-free rate) on the market excess return. Carhart 4 Factor alpha is the result from a time-series regression of the portfolio excess return on the three Fama and French (1993) mimicking portfolios and the Carhart momentum factor.

A6 Portfolio Choice Conditional on Holding

Table A6 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. Among the companies that they chose to actively hold, members on average place much larger bets in local and contributor companies.

Table A5: Portfolio Weights as a Function of Member-Firm Connections (Conditional on Holding)

Model	(1)	(2)	(3)	(4)	(5)
Dependent Variable:	Portfolio Weight				
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)
Members Fixed Effects	x	x	x	x	x
Firms Fixed Effects	x	x	x	x	x
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).

A7 Alpha Returns for Investments in Politically Connected Stocks

Table A7 replicates the analysis of Table 4 using the single-time series approach where the monthly returns are first aggregated across members (value-weighted or equal-weighted) to a single monthly portfolio return.

Table A7 Monthly Abnormal Return for Connected and Unconnected Stocks

	Aggregate Congressional Portfolio			Average Member Portfolio		
	Connected	Unconnected	Long/Short	Connected	Unconnected	Long/Short
Panel A: Excess Returns from CAPM						
Lobbying (Any)	-0.277	-0.234	-0.043	-0.244	-0.196	-0.048
	(0.138)	(0.163)	(0.232)	(0.113)	(0.130)	(0.171)
Lobbying ($> p50$)	-0.21	-0.305	0.094	-0.241	-0.265	0.024
	(0.158)	(0.129)	(0.211)	(0.128)	(0.107)	(0.154)
Contributions (Any)	-0.083	-0.311	0.228	-0.147	-0.28	0.133
	(0.234)	(0.094)	(0.230)	(0.175)	(0.086)	(0.151)
Contributions ($> p50$)	-0.216	-0.277	0.06	-0.14	-0.312	0.172
	(0.284)	(0.093)	(0.270)	(0.176)	(0.090)	(0.140)
Lobbying & Contributions	-0.055	-0.314	0.258	-0.141	-0.265	0.124
	(0.243)	(0.094)	(0.238)	(0.163)	(0.091)	(0.136)
In District	0.07	-0.283	0.353	0.354	-0.335	0.688
	(0.426)	(0.088)	(0.424)	(0.192)	(0.093)	(0.173)
District & Contributions	0.277	-0.288	0.564	0.354	-0.327	0.681
	(0.663)	(0.093)	(0.653)	(0.190)	(0.094)	(0.169)
District & Lobbying	0.579	-0.298	0.877	0.433	-0.324	0.757
	(0.486)	(0.092)	(0.475)	(0.192)	(0.091)	(0.155)
Panel B: Excess Returns from Carhart 4-Factor						
Lobbying (Any)	-0.174	-0.31	0.136	-0.124	-0.249	0.125
	(0.124)	(0.180)	(0.225)	(0.095)	(0.094)	(0.129)
Lobbying ($> p50$)	-0.111	-0.33	0.219	-0.115	-0.264	0.149
	(0.151)	(0.148)	(0.220)	(0.110)	(0.076)	(0.126)
Contributions (Any)	0.03	-0.302	0.332	-0.019	-0.259	0.239
	(0.235)	(0.100)	(0.233)	(0.137)	(0.074)	(0.112)
Contributions ($> p50$)	-0.083	-0.259	0.176	0.016	-0.277	0.293
	(0.244)	(0.101)	(0.238)	(0.139)	(0.079)	(0.118)
Lobbying & Contributions	0.052	-0.301	0.353	-0.038	-0.227	0.189
	(0.252)	(0.100)	(0.249)	(0.139)	(0.078)	(0.117)
In District	0.044	-0.246	0.29	0.423	-0.272	0.696
	(0.429)	(0.094)	(0.424)	(0.152)	(0.086)	(0.168)
District & Contributions	0.403	-0.261	0.664	0.500	-0.274	0.774
	(0.681)	(0.098)	(0.679)	(0.178)	(0.084)	(0.204)
District & Lobbying	0.721	-0.272	0.993	0.529	-0.268	0.797
	(0.521)	(0.097)	(0.514)	(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. Aggregate returns are for a portfolio that mimics the aggregate investments of all members of Congress (value-weighted) in either connected or unconnected stocks. 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.

A8 Abnormal Returns for Company-Level Connected and Unconnected Stocks

Table A8 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 A8 Abnormal Returns for Company Level Connected and Unconnected Stocks

	Aggregate Congressional Portfolio			Average Member Portfolio		
	Connected	Unconnected	Long/Short	Connected	Unconnected	Long/Short
Panel A: Excess Returns from CAPM						
Lobbying (Any)	-0.291	-0.152	-0.138	-0.247	-0.06	-0.187
	(0.104)	(0.178)	(0.237)	(0.144)	(0.197)	(0.230)
Contributions (Any)	-0.295	-0.23	-0.064	-0.282	-0.062	-0.219
	(0.141)	(0.153)	(0.251)	(0.172)	(0.121)	(0.207)
Panel B: Excess Returns from Carhart 4-Factor						
Lobbying (Any)	-0.236	-0.325	0.089	-0.126	-0.154	0.028
	(0.096)	(0.202)	(0.242)	(0.100)	(0.119)	(0.133)
Contributions (Any)	-0.214	-0.313	0.1	-0.108	-0.17	0.062
	(0.118)	(0.171)	(0.236)	(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. Aggregate returns are for a portfolio that mimics the aggregate investments of all members of Congress (value-weighted) in either connected or unconnected stocks. 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.

A9 Excess Returns on Transaction-Based Portfolios by Connection and Holding Period

Table A9 assesses whether connected trades appear to be better timed than other trades, using the same approach (aggregated, transaction-based portfolios) as Table A5. 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.

		Aggregate Congressional Portfolio						Average Member Portfolio					
		Connected			Unconnected			Connected			Unconnected		
Connection	Holding Period	Buys	Sells	L/S	Buys	Sells	L/S	Buys	Sells	L/S	Buys	Sells	L/S
In District	1 Day	0.159	-0.434	0.319	0.574	1.524	-0.950	0.229	-0.371	0.315	0.785	1.703	-0.918
		(0.579)	(0.896)	(1.277)	(0.735)	(0.754)	(1.025)	(0.591)	(0.888)	(1.267)	(0.531)	(0.664)	(0.807)
In District	10 Days	-0.599	0.902	-1.357	-0.619	0.329	-0.948	-0.344	0.879	-1.120	0.048	0.357	-0.308
		(0.851)	(0.913)	(1.279)	(0.495)	(0.385)	(0.680)	(0.736)	(0.887)	(1.156)	(0.294)	(0.268)	(0.296)
In District	25 Days	0.153	1.197	-1.044	-0.319	0.172	-0.491	0.394	0.798	-0.404	0.227	0.113	0.114
		(0.727)	(1.002)	(1.219)	(0.442)	(0.317)	(0.396)	(0.592)	(0.947)	(1.015)	(0.326)	(0.303)	(0.174)
In District	140 Days	0.492	-0.670	1.162	-0.034	-0.197	0.163	0.090	-0.246	0.336	-0.163	-0.217	0.054
		(0.520)	(0.609)	(0.761)	(0.194)	(0.137)	(0.205)	(0.429)	(0.390)	(0.491)	(0.184)	(0.172)	(0.166)
In District	255 Days	0.333	-0.574	0.907	-0.154	-0.112	-0.042	-0.152	-0.148	-0.004	-0.011	-0.153	0.143
		(0.425)	(0.500)	(0.625)	(0.170)	(0.101)	(0.163)	(0.308)	(0.325)	(0.394)	(0.137)	(0.117)	(0.134)
District & Contributions	1 Days	-0.498	-0.206	-0.379	0.667	1.755	-1.089	-0.484	-0.209	-0.352	0.811	1.737	-0.925
		(0.720)	(0.412)	(1.084)	(0.736)	(0.749)	(0.965)	(0.717)	(0.411)	(1.077)	(0.529)	(0.655)	(0.799)
District & Contributions	10 Days	-0.480	1.616	-1.595	-0.633	0.390	-1.023	-0.187	1.333	-0.705	0.037	0.375	-0.338
		(1.010)	(1.254)	(1.658)	(0.494)	(0.381)	(0.669)	(0.961)	(1.198)	(1.414)	(0.296)	(0.267)	(0.297)
District & Contributions	25 Days	-0.704	0.565	-0.914	-0.311	0.202	-0.513	-0.134	0.731	-0.391	0.237	0.181	0.056
		(1.403)	(1.051)	(1.608)	(0.440)	(0.318)	(0.396)	(1.322)	(1.055)	(1.628)	(0.328)	(0.301)	(0.186)
District & Contributions	140 Days	0.164	-0.285	0.420	-0.024	-0.244	0.219	0.184	-0.671	0.924	-0.166	-0.203	0.037
		(0.994)	(0.685)	(1.057)	(0.193)	(0.130)	(0.207)	(0.705)	(0.644)	(0.779)	(0.182)	(0.168)	(0.165)
District & Contributions	255 Days	1.538	0.363	1.222	-0.153	-0.134	-0.018	0.734	-0.070	0.898	-0.035	-0.171	0.136
		(0.959)	(0.651)	(1.071)	(0.169)	(0.095)	(0.166)	(0.581)	(0.554)	(0.664)	(0.137)	(0.109)	(0.136)
District & Lobbying	1 Day	0.395	-0.327	0.516	0.634	1.792	-1.157	0.535	-0.271	0.590	0.806	1.764	-0.958
		(0.548)	(0.403)	(0.756)	(0.737)	(0.752)	(0.960)	(0.547)	(0.411)	(0.769)	(0.530)	(0.654)	(0.789)
District & Lobbying	10 Days	0.494	1.461	-1.415	-0.636	0.369	-1.005	0.931	1.278	-0.676	0.035	0.376	-0.341
		(1.096)	(1.014)	(1.741)	(0.494)	(0.377)	(0.668)	(1.033)	(0.966)	(1.617)	(0.296)	(0.269)	(0.295)
District & Lobbying	25 Days	0.068	0.653	-0.958	-0.323	0.187	-0.509	0.516	0.290	-0.082	0.228	0.167	0.061
		(0.823)	(1.006)	(1.310)	(0.441)	(0.317)	(0.394)	(0.755)	(0.971)	(1.191)	(0.329)	(0.305)	(0.181)
District & Lobbying	140 Days	1.066	0.048	1.029	-0.034	-0.250	0.216	0.623	-0.224	0.842	-0.166	-0.187	0.021
		(0.637)	(0.544)	(0.700)	(0.194)	(0.130)	(0.208)	(0.498)	(0.459)	(0.551)	(0.182)	(0.171)	(0.164)
District & Lobbying	255 Days	1.182	0.886	0.287	-0.156	-0.146	-0.010	0.277	0.309	-0.043	-0.006	-0.172	0.166
		(0.496)	(0.491)	(0.616)	(0.170)	(0.095)	(0.165)	(0.395)	(0.365)	(0.491)	(0.141)	(0.110)	(0.135)

A10 Performance of Local Stocks by Firm Size

Table A10 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 A10: Returns on Local Stocks in S&P 500

	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