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Abstract

Corporate Political Contributions and Stock Returns

We develop a new and comprehensive database of firm-level contributions to U.S. political campaigns from 1979 to 2004. We construct variables that measure the extent of firm support for candidates. We find that these measures are positively and significantly correlated with the cross-section of future returns. The effect is strongest for firms that support a greater number of candidates which hold office in the same state that the firm is based. In addition, there are stronger effects for firms whose contributions are slanted toward House candidates and Democrats.

Despite a spate of recent events concerning lobbyists and other special interest groups and their alleged undue influence on elected officials[1], the U.S. political system is viewed by many as a relatively fair and impartial form of government, especially when compared to other governments (Kaufmann, Kraay, and Mastruzzi (2003)). However, in the US, firms that contribute money to politicians appear to enjoy more frequent and better-quality access to politicians (Kroszner and Stratmann (1998), Langbein and Lotwis (1990), Durden et al (1991), Stratmann (1991), Stratmann (1995, 1998)), but contributing firms and firms with other types of political connectedness do not appear to change the outcome of votes on issues critical to connected firms. For example, Ansolabehere, de Figueiredo, and Snyder (2003) survey 36 studies on the political efficacy of interest group contributions to politicians and find that contributions have apparently relatively little effect on voting outcomes.

Corporate contributions may not help the donating firms on average to influence voting outcomes, but there is evidence that the funds raised by candidates help them win elections. Snyder (1990) documents a positive relationship between the amount of contributions coming from special interest groups and the probability of a legislator winning an election.[2] In addition, Grier and Munger (1991), Romer and Snyder (1994) and Ansolabehere and Snyder (1999) show that influential legislators (i.e., party leaders, committee chairs, and members of powerful committees) raise substantially more funds than other legislators. So, contributions appear to increase the welfare of the candidates, but are contributions associated with an increase in the welfare of the corporate contributors? In addition, if contributing firms benefit, does that imply that firm contributions *cause* the benefits, or is it simply that better firms contribute more?

In this paper, we address these important questions by studying shareholder wealth effects for firms that make contributions to political candidates. Our main focus is on the question of whether there exists a robust relationship between contributions and changes in contributors' shareholder wealth. We also present tests addressing the causality question, but view our results as preliminary and defer to future research for a more rigorous treatment. Using data from the U.S. Federal Election Commission (FEC), we create a new and comprehensive database of publicly traded firms' political action committee (PAC) contributions to political campaigns in the U.S. from 1979 to 2004. After merging the FEC contributions data with CRSP/Compustat data, we have approximately 800,000 contributions made by 1,633 firms over the past twenty five years or so – thus, we have a remarkably rich dataset to test for systematic contribution/return effects arising from publicly traded firms' involvement in the U.S. political process. Our sample captures over 70% of the total dollar volume of

[1] Many examples of past and present political controversies can be found at The Center for Responsive Politics web page at http://www.crp.org/.
[2] Stratmann (2005) provides a survey of the related literature.

all hard-money corporate contributions and represents on average 60% of the market-value-weighted capitalization of all publicly traded firms in the U.S.

We develop a simple measure to describe firms' political contribution practices that takes advantage of the comprehensive nature of the FEC data. We view each firm as supporting a portfolio of candidates and simply sum up, over a rolling multiyear window, the number of candidates that each firm supports. We find that the average firm participating in the political donation process contributes to 73 candidates over any five-year period, 53 of whom go on to win their elections. There is substantial variability across firms in the number of supported candidates, with a standard deviation of approximately 96 candidates.

We perform panel regressions of returns on the lagged number of supported candidates and other control variables. We find that the number of supported candidates has a statistically significant positive relation with future abnormal returns for firms which contribute to political candidates. The relationship is evident in univariate regressions of abnormal returns on the number of supported candidates as well as in multivariate regressions after controlling for other established predictors of returns such as book-to-market (BM), firm capitalization (SIZE), and momentum, measured by lagged 12-month buy-and-hold returns (BHRET12).

To better understand the sources of the contribution effect, we examine variations on our basic measure of total supported candidates. These modified measures capture the total strength of the relationships between candidates and the contributing firm (as measured by the length of the firm-candidate relationship), the ability of the candidates to help the firm (as measured by the home state of the firm and the candidate), and the power of the candidates (as measured by a candidate's committee ranking). We find that our results are robust to these alternative contribution definitions. We document especially strong effects for a measure related to the ability of the candidate to help the donating firm. Thus, the contribution effect appears to increase for firms that have longer relationships with candidates, support more home candidates, and support more powerful candidates. We further break the contributions data up into House and Senate categories. We find that there is an incremental House effect after controlling for the Senate effect, although contributions to both branches of government result in positive economic effects for the contributing firms. Our finding of an incremental effect for firms supporting House candidates may be related to the constitutional provision that revenue and appropriations bills must originate in the House. Thus, firms may find that it is more expedient to support House members, where potential firm welfare increasing actions may be more suitably created. We also split our sample along political party lines. The FEC data show that Republican candidates typically receive higher total dollar contributions than do Democrats and that Republican candidates' contributions come from a larger number of supporting firms than do

Democrat candidates' contributions. However, despite the fact that Republicans receive more contributions than Democrats, we find an incremental contribution effect for Democrats after controlling for Republican effect, but do not find an incremental Republican effect after controlling for the Democrat effect.

We also create annually rebalanced political index-weighted portfolios. We find that the portfolios earn abnormal returns. For example, a portfolio of firms weighted by the number of supported candidates has a statistically significant Fama-French-Carhart four-factor model abnormal monthly return of 21 basis points (or about 2.4% per year). We perform further tests to evaluate the risk of the political contribution portfolios. First, we follow Lakonishok, Shleifer, and Vishny (1994) and examine the performance of the political contribution stocks in up and down market states. We find that political contribution portfolios earn greater returns in negative market states than in positive market states, suggesting that politically active firms may enjoy a greater level of "protection" in bad times, consistent with Gordon, Hafer, and Landra's (2007) theory that political giving may serve as a form of insurance. Second, we examine the covariation of the political portfolio's beta with the expected market risk premium in a conditional CAPM framework. We find that the political portfolios are not riskier in periods of high market risk premium, results inconsistent with a time-varying risk story.

Our paper is not the first to document wealth effects to firms from being connected to politicians; there is an important and growing literature on the welfare benefits to firms which exhibit a degree of connectedness to politicians. These studies examine connectedness arising from 1) explicit relationships between firms and politicians (e.g., the politician is a member of the firm's board of directors) and 2) a firm's contributions of money to a politician's coffers.

Connectedness arising from explicit relationships appears to be important for firm welfare. Faccio (2006) examines stock price reactions to the announcement of two potentially connectedness increasing events; one, that a firm's officer or a large shareholder enters politics and two, that a politician joins a firm's board. She documents an over 2% increase in firm value at the announcement that an officer or large shareholder enters politics. Faccio and Parsley (2006) document an approximate 2% decline in the market value of firms connected to legislators for a sample of 123 legislators who unexpectedly die. Fisman (2001) examines Indonesian firms that are connected to the Suharto family and shows that these companies decrease in value following announcements of declining health of President Suharto. Faccio, Masulis, and McConnell (2006)

find that the likelihood of government bailouts of financially distressed firms increases for firms that have a top company officer or large shareholder in an important government position.[3]

Connectedness arising from firm contributions to politicians also appears to be important for firm welfare. Roberts (1990) finds a decrease in firm value at the time of death of U.S. senator Henry Jackson, for firms that made contributions to his campaign. Jayachandran (2006) analyzes the announcement effects of Senator Jim Jeffords decision to leave the Republican Party in 2001, a decision that transferred the control of the Senate from Republicans to Democrats. He finds that the decision resulted in an almost 1% decline in the market value of firms contributing to Republicans and an increase in market value for firms supporting Democratic candidates. Goldman, Rocholl, and So (2006) find that individual firms connected to the U.S. Republican Party increased in value after the Republican win in the 2000 Presidential elections. Ansolabehere, Snyder, and Ueda (2004) study return effects to firms that either did or did not give soft money donations around five important events in the approval of the Bi-Partisan Campaign Reform Act (BCRA), which banned soft-money contributions. They find no noticeable return differences across donor and non-donor firms for the five events surrounding the BCRA.

Overall, the existing research on the value to the firm of political connections is intriguing; there appear to be positive shareholder wealth effects to being connected and the value of being connected is greater in more corrupt countries. In this paper, using our merged FEC/CRSP/Compustat data base, we are able to construct firm-specific year-by-year connectedness measures, allowing us to perform tests over the full sample, something which has not been possible with previous event-based measures of political connectedness. With this new dataset, we document a strong correlation between lagged contributions and future returns.

Is the documented correlation evidence of a causal link between firm PAC contributions and future stock prices? Answering this question in the affirmative requires resolution of potential endogeneity problems with our data. Later in the paper we offer anecdotal evidence that is consistent with causation: we discuss the growing body of literature that documents benefits to firms from being politically connected; we examine the link between contributions and returns around exogenous shocks to contributions (changes in the allocations of House Representatives to states based on US Census counts); and we perform instrumental variables tests using two instruments for our contribution variables (the number of House Representatives in the firm's state and the number of firm employees). The results of these tests are indicative of a causal link between contributions and future returns, but do not conclusively prove the link. Our hope is that future work, perhaps using this

[3] See also Leuz and Oberholzer-Gee (2006) who study the role of political connections and their implications for firms' financing and long-run financial performance in Indonesia and Fisman, Fisman, Galef, and Khurana (2006) who examine the value to firms of having personal ties to U.S. Vice-President Dick Cheney.

paper's new contributions database along with legislation and other information, can better determine whether our results arise from 1) better (higher return) firms making more contributions or 2) firms that make more contributions earn greater returns and this arises A) in part from elected officials maximizing general public welfare or B) it suggests an unfair exchange of dollars for policy, resulting in wealth transfers from those firms without access to those firms with access, or subsidies from taxpayers to contributing firms.

The remainder of the paper is organized as follows. In Section I we describe the data used in our analysis and detail the construction of the firm political contribution measures. In Section II we present results which document the effects of political contributions on future returns. In Section III we explore the sources of the contribution effect. Section IV concludes.

I. Data Sources and Variable Construction

A. Contribution data

Our data on corporate contributions is from the Federal Election Commission (FEC) detailed committee and candidate summary contribution files for the period 1979 – 2004.[4] We merge the FEC data with CRSP/Compustat data and build a comprehensive database of firm contributions, monthly returns, and annual firm accounting characteristics from 1984 to 2005. We first describe the FEC data, detail the construction of contribution variables designed to capture return effects, and then describe the full merged FEC/CRSP/Compustat dataset.

We obtain FEC data on total campaign financing raised by each candidate's (re)election campaign. The contribution data are all "hard-money" contributions meaning that they are made to specific candidates and the contributions are limited to $10,000 per candidate per election cycle ($5,000 contributed during a primary election and $5,000 contributed during a general election).[5] See Appendix A for details on the limits of contributions and other aspects of campaign finance law. The FEC database identifies seven distinct groups that contribute to candidates' campaigns: (i) individuals, (ii) labor organizations, (iii) corporations, (iv) trade, membership, and health organizations, (v) party committees, (vi) non-party committees, and (vii) corporations without capital stock. We obtain data on total funds received by each candidate from each of these groups. The FEC detailed committee contribution file consists of 2,794,790 contributions made by all special interest

[4] The summary file provides data on how much total money each candidate received from different interest groups, what the total cost of the election was, and other related information. The detailed file provides contribution-by-contribution data for each candidate. It records all contributions in excess of $200 made by all special interest groups (corporations for our purposes), the date of the contribution, and the amount.

[5] This is in contrast to "soft-money" contributions which are non-candidate specific contributions from individuals and special interest groups used on voter registration expenses, "get out the vote" campaigns, "party building," issue advertising, and other administrative expenses. The Bipartisan Campaign Reform Act of 2002 banned soft money contributions.

groups to all candidates running for the President, the Senate, and the House of Representatives. We limit our sample to all contributions made by corporations through their corporate political action committees (1,064,830 observations). After further deleting private firms, subsidiaries of foreign firms and firms with no data on CRSP, we are left with 819,815 contributions made by 1,930 unique firms. Thus, not all publicly traded firms have PACs - we find that on average only 9.49% of firms listed on the combined CRSP/Compustat database participate in the contribution process and these firms tend to be very large firms (e.g., the average capitalization of contributing firms in 2004 places them at the top 8 % of NYSE market cap).

We obtain data on the identity of the contributing firm, the date and the amount of contribution, and the identity of the receiving candidate. For each receiving candidate, we also use the FEC data on the sought after public office, the state and the district for which the candidate is running, the candidate's party affiliation, and the election outcome. For all elected officials, we obtain data on their committee assignments and their party rankings on each serving committee. This data is from Charles Stewart's Congressional Data Page.[6] Figure 1 reports the giving totals per the seven groups (aggregated across all candidates for each two-year election cycle). Panel A reports the results for the House races. [7] Panel B reports the results for the Senate races, in which one-third of all senators seek reelection each election cycle.

Individuals constitute the largest group of contributors, contributing between 60 and 80% of total campaign financing for the Senate races and between 40 and 60% of total campaign financing for the House races. This totals over $3.8 billion during the 26-year period. It is worth pointing out that individual contributions are spread over many individuals who contribute in small amounts. Ansolabehere et al (2003) estimate that the average individual contribution is a trivial $115.

Corporate contributions constitute a notably lower fraction of candidates' total campaign financing. We document below, however, that, because these contributions come from significantly fewer firms (relative to individual contributions), their dollar amounts are much larger than those of individuals. On average, corporate contributions comprise 12% (10%) of total campaign financing for Republican (Democrat) candidates running for the House and 9% (5%) for Republican (Democrat) candidates running for the Senate. There is significant heterogeneity in how much financing comes from corporations across different candidates. We find that the ratio of corporate contributions to total money raised ranges from zero percent to 90.59% (53.87%) for Republicans

[6] We thank Charles Stewart III for generously providing this data on his website http://web.mit.edu/17.251/www/data_page.html.

[7] In these figures, we concentrate on House and Senate contributions. This is because firms contribute only insignificantly to Presidential races. .

(Democrats) running for the House and from zero percent to 39.20% (28.46%) for Republicans (Democrats) running for the Senate.

One implication of the percentages reported above is that corporate contributions on average represent only a small fraction of candidates' campaign financing and, therefore, are unlikely to buy candidates' attention. However, if firms are making large contributions relative to other contributors, they are much more likely to be noticed even though these contributions represent only a small percentage of total money raised. Table I analyzes the size and frequency of corporate contributions.

Panel A of table I reports that the per firm average contribution totals (across all candidates) $64,694 during any two-year election cycle. This amount is spread over an average of 56 contributions. This total amount varies significantly between the minimum contribution total of only $29 to the maximum contribution total of $2.7 million. Democrats receive on average $30,758 from each firm, while Republicans receive $43,126. Thus, corporate contributions are much larger than individual contributions and, therefore, are much more likely to be noticed by the receiving candidates.

In panel B, a typical firm supports 31 candidates per election cycle, 16 Democrats and 20 Republicans. This number also varies substantially from one supported candidate per election cycle to 564 supported candidates per election cycle. We find no evidence that firms that support fewer candidates give less money per candidate. For example, firms that support only a single candidate give on average (standard deviation) $1,837 dollars ($2,131), while firms that support 10, 20, and 30 candidates give on average $1,703 ($2,148), $1,747 ($1,963) and $1,540 ($1,870) per candidate respectively. It appears, therefore, that the total amount of giving per firm is determined by the number of candidates that the firm chooses to support, not by the amount that each candidate receives, which appears to be fairly constant across candidates. The results in table I also indicate that firms on average are not constrained by the FEC contribution limits. Firms contribute just over $2,000 per candidate per election cycle ($64,694 / 31 candidates = $2,086.90), well under the $10,000 contribution limit imposed by the FEC. Similar evidence is reported in Ansolabehere et al (2003).[8]

B. Contribution Indexes

We use the FEC data to create measures that describe firms' relationships with political candidates. We construct our initial measure based upon implications from the above results that not all firms participate in the contribution process, the average contribution per candidate is about the

[8] It is unlikely that firms contribute below contribution limits because they receive little money from individuals allowed to contribute to their PACs. Ansolabehere et al (2003) report that corporate PACs can double the amount they contribute to political candidates by legally shifting their overhead expenses to the sponsoring firms. Instead, corporate PACs choose to pay for overhead and other administrative expenses from the funds raised from corporate officers and employees.

same regardless of how many candidates a firm supports, the participating firms are very large, and the FEC contribution limits are on average not binding. Those findings are consistent with the idea that to establish a meaningful link with a politician, it may require more than simply donating $10,000 in hard-money contributions to a candidate – that is, it may require soft money-like contributions, or other forms of non-money favors, which are not publicly disclosed, and which only larger firms can afford.[9] Thus, a potential way to summarize firm contribution practices is to keep track of the total number of candidates that a firm supports. As long as hard money contributions are correlated with other ways in which firms establish relationships with politicians (there is evidence that they are correlated; see Milyo, Primo, and Groseclose (2000) and Bombardini and Trebbi (2008)), then the number of politicians that a firm supports with hard money contributions is a good proxy for the degree of firm involvement in the political process.

Thus, our initial measure is simply the sum of supported candidates (House, Senate, and Presidential) over a rolling multiyear window. At the end of October of each year, we compute the total number of supported candidates over the previous five years for each firm in our sample. The five year window would seem to be a reasonable length of time to capture potential candidate/firm relationships. For example, Snyder (1992) discusses the desire of firm PACs to establish long-term relationships with politicians. We use an October cutoff point to match up the timing of political contributions to the timing of elections, which take place on the Tuesday following the first Monday in November every even year. The "political index" (PI) for the number of supported candidates for firm *i* in year *t* is:

$$PI_{it}^{candidates} = \sum_{j=1}^{J} Cand_{jt,t-5} \qquad (1)$$

where $Cand_{jt,t-5}$ is an indicator variable equal to one if the firm has contributed money to candidate *j* over the years *t-5* and *t*. The FEC contribution data is from January of 1979 to December of 2004. Since we require 5 years of data to compute equation 1, the number-of-supported-candidates index is computed once a year, from October of 1984 to October of 2004.

We create variations on our basic measure of number of supported candidates. These robustness measures are designed to scale equation 1 with other important contribution dimensions related to the strength of the relationship between a candidate and the contributing firm, the ability of

[9] Anecdotal examples of firms helping politicians include: The *New York Times* (see McIntire (2006)) reports that large insurance companies in New York State skirted around legal contribution limits to candidates by routing contributions through dozens of obscure subsidiaries; *The Salt Lake Tribune* (see Ivins (2006)) reports that President Bush took 14 free rides on Enron corporate jets during the 2000 Presidential campaign; *The Salt Lake Tribune* (See Drinkard 2006)) reports that FedEx, U.S. Tobacco, Union Pacific, the Texas plaintiff's law firm of Baron & Budd, Burlington Northern Santa Fe, R.J. Reynolds, and Barr Laboratories are among those companies that most frequently fly members of Congress around the country on their company jets, upon request of the politician.

a candidate to help the firm, and the power of a candidate. Numerous papers from the political science literature suggest that these dimensions are important in the firm/candidate relationship.

Concerning the strength of the relationship, Kroszner and Stratmann (1998) show that to maximize contributions, legislators tend to build relationships over time with PACs by participating on specialized committees and catering to PACs' interests. Snyder (1992) presents evidence that long-term PAC/candidate relationships are valuable for many PACs. Stratmann (1998) documents that highly reputable politicians are more likely to receive contributions prior to critical votes, while less reputable politicians are more likely to receive contributions after critical votes. Thus, politicians that have strong relationships with special interest groups (and therefore are considered more trustworthy) are valued (and rewarded) differently by special interest groups than other politicians. Regarding the ability of the politician to help the contributing firm, Kroszner and Stratmann (1998) suggest that politicians may cater to their constituents and exert greater bureaucratic effort on initiatives that benefit the local constituency. Consistent with this argument, Roberts (1990) finds a significant negative stock price reaction at the announcement of Senator Jackson's death for firms operating in his district. In addition, Faccio and Parsley (2006) find important economic effects for firms linked to local politicians. These findings suggest that firms adjust their contributions to politicians as the expected ability of these politicians to help the firm changes. Finally, pertaining to the power of the candidate, Grier and Munger (1991), Romer and Snyder (1994) and Ansolabehere and Snyder (1999) document that elected officials who are committee chairs or who serve on powerful committees raise substantially more money than other members.

Thus, using the aforementioned papers as a guide, we construct three political indexes designed to capture strength, ability, and power features of the firm/candidate relationship. We construct the strength of the relationships between candidates and the contributing firm as follows. Each candidate supported by a firm and currently in office as of October of year *t*, gets assigned an indicator variable of one. We then multiply the indicator variable by the number of months that the firm has maintained an uninterrupted relationship with the candidate. We consider uninterrupted relationships as those relationships in which the firm did not miss any past reelection cycles of the candidate. We then scale that number by the ratio of total House or Senate votes the candidate's party has relative to the total votes of the opposing party (for either the House or the Senate) with the idea that the firm/candidate relationship grows stronger (weaker) for candidates from the controlling (opposing) party. Thus, the PI strength measure for firm *i* in year *t* is:

$$PI_{it}^{strength} = \sum_{j=1}^{J} Cand_{jt,t-5} \times I_{jt} \times \frac{NCV_{jt}}{NOV_{jt}} \times rellength_{jt,t-5} \qquad (2)$$

where $Cand_{jt,t-5}$ is an indicator variable equal to one if the firm has contributed money to candidate *j* over the years *t-5* and *t*, I_{jt} is an indicator variable equal to one if candidate *j* is in office at time *t* and zero otherwise, NCV_{jt} is the number of votes that candidate *j*'s party holds in office at time *t*, NOV_{jt} is the number of votes that candidate *j*'s opposing party holds in office at time *t*, and $rellength_{jt}$ is the number of months that firm *i* has maintained an uninterrupted relationship with candidate *j* until time *t*. The ratio $\frac{NCV_{jt}}{NOV_{jt}}$ captures the candidate's party strength relative to the opposition party.

The second variation is designed to capture the ability of the candidates to help a firm. In this measure, we only include candidates that hold office in the same state in which the firm is headquartered. We obtain firm headquarter data from Compustat. The PI ability measure for firm *i* in year *t* is:

$$PI_{it}^{ability} = \sum_{j=1}^{J} HomeCandidate_{jt,t-5} \times I_{jt} \times \frac{NCV_{jt}}{NOV_{jt}} \tag{3}$$

where $HomeCandidate_{jt,t-5}$ is an indicator variable if candidate *j* is running for office from the state where firm *i* is headquartered and zero otherwise, and the rest of the variables are as defined above.

The last variation is designed to measure the power of the candidates. In this measure, we weight the candidate by the sum of the candidate's committee rankings. The PI power measure for firm *i* in year *t* is:

$$PI_{it}^{power} = \sum_{j=1}^{J} Cand_{jt,t-5} \times I_{jt} \times \frac{NCV_{jt}}{NOV_{jt}} \times \left[\sum_{m=1}^{M} \frac{Committeerank_{mt}}{Mediancommitteerank_{mt}} \right]_j \tag{4}$$

where $Committee\ rank_{mt}$ is the reciprocal of candidate *j*'s rank on committee *m (*where rank =1 for the most important member, rank = 2, for the next important, and so on), $Median\ committee\ rank_{mt}$ is the median number of members on a given committee *m* for which candidate *j*'s is a member, and the rest of the variables are as defined above.

Table II reports summary statistics on the four political indexes. Our sample of all firms with established PACs captures 71.08% of the total dollar volume of all corporate contributions reported by the FEC. We find that contributing firms on average support 72.5 candidates (standard deviation of 95.9) over any given five-year period.[10] Of these 72 candidates, 53.2 win their race (not reported in the table). The median number of supported candidates is 31. The minimum number of supported candidates is one (460 firms in our sample support a single candidate over some five year window) and the maximum is 818 (AT&T Corp in 1984). The average (standard deviation) of the strength index, equation 2, is 1,691 (3,394.4) candidate-months, for the ability index, equation 3, it is 6.9 (7.3)

[10] We also calculate the standard deviation of the time series of each firm's number of supported candidates: the standard deviation of the average (median) number of supported candidates is 22.26 (11.63).

home candidates, and for the power index, equation 4, it is 256.2 (337.4) candidate committee rank units. We merge the firms' political indexes (and other data from FEC) with data from CRSP and Compustat to create a merged database from November of 1984 to October of 2005. We manually match firm names from CRSP with the names of sponsoring corporations reported by the FEC. In cases involving firm name changes, we examine corporate SEC filings to find the appropriate matching name. In cases involving wholly-owned subsidiaries of other firms, we identify the ultimate parent firm from the SEC filings. We require that firms have nonmissing values of the independent variables used in our panel regressions (for example, nonmissing book-to-market and capitalization in year *t*). To mitigate backfilling biases, a firm must be listed on Compustat for two years before it is included in the data set (Fama and French, 1993). These requirements further reduce our sample from 819,815 contributions made by 1,930 unique firms to 799,786 contributions made by 1,633 unique firms. We merge the end-of-October contribution measures with firm monthly returns from November of year *t* to October of year *t+1*. As control variables in many of our tests, we use market value scaled accounting ratios, such as book-to-market (BM) and firm capitalization (SIZE). To construct the ratios, we use accounting information from fiscal year end *t*-1 from Compustat and capitalization from December of year *t*-1. For firm capitalization alone, we use the market value of the firm's equity from CRSP at the end of June of year *t*. When our tests include lagged return measures (for example, twelve-month lagged returns) we estimate a monthly updated annual buy-and-hold return over the previous 12 months, skipping the return in month *t*-1 (to avoid microstructure related biases). In keeping with the convention in most cross-sectional asset pricing papers, BM and SIZE are updated annually, at the end of June each year. Political indexes are updated annually, at the end of October each year.

In Table III we report formation period (that is, for the year prior to and including October of year *t*) summary statistics for various firm characteristics of contributing and non-contributing firms. We report the time-series average of yearly cross-sectional median values and the average of yearly cross-sectional averages for capitalization (SIZE). The non-contributing firms are all firms in CRSP/Compustat that meet the above sample formation screens but do not appear on the FEC database. Appendix B provides exact formulas for the non-political index variables used in our tests. In Panel A, contributing firms are much larger than non-contributing firms; the time-series average of the yearly median capitalization of contributors is \$1.6B versus \$168M for the non-contributing firms (the time-series average of the yearly mean capitalization is \$6.5B for contributors and \$779M for non-contributors). In a typical year, our sample includes 697 contributing firms which constitute 9.5% of all publicly traded firms and represent 62.4% of the total market capitalization. We find that the average capitalization of contributing firms, computed relative to annually ranked NYSE

breakpoints, places the contributing firms consistently in the top 13% of capitalization. Thus, firms participating in the political process are very large firms. Contributing firms on average have lower returns over the previous 36 months, higher book-to-market, lower cash flow, and higher leverage than do the non-contributors. The last observation is consistent with Faccio, Masulis, and McConnell (2006) who find that government bailed out politically-connected firms have significantly higher leverage ratios than their non-connected matching peers.

In Table III, panel B, we report characteristics of the contributing firms based on annual decile sorts of the number of supported candidates (equation 1) measure. Some interesting patterns emerge. First, the firms that support more candidates are much larger firms than the firms that support fewer candidates: The average capitalization of the firms in the top decile of number of supported candidates is $27.3B, decreasing almost monotonically to $1.3B for the firms in decile one of supported candidates. The top decile contribution firms have lower 36-month returns and are more profitable (as judged by PROFIT and ROE) than the firms in the lowest decile. In Table III Panel C, to better understand which types of firms participate in the political process, we examine the characteristics of firms with and without PACs within size-ranked deciles. We sort all firms by NYSE annually ranked decile breakpoints and within each decile report the characteristics of contributing and non-contributing firms. We find that the percentage of firms making contributions increases dramatically as we move from the smallest to the largest decile of annually ranked NYSE breakpoint capitalization (these numbers are not reported in the table); the percentage of firms making contributions is 2.4% for the smallest decile, 21.9% for decile five, and 68.5% for the largest decile. In addition, contributors tend to have lower prior 36-month returns, higher book-to-market and leverage, and lower cash flow and profitability compared to similar size non-contributors. The above patterns are consistent with a simple story: if there are in fact extra costs (above and beyond the nominal costs of hard-money contributions) to participating effectively in the contribution process, then it appears that the high-contributing firms, with their much larger firm size may be more able to incur these expenses than the low-contributing firms. In addition, because of their recent poor stock price and earnings performance, PAC firms, relative to their non-contributing size matched peers, may have a greater incentive to establish political connections that can help increase firm performance.

II. Results

A. Panel Regressions

We perform panel (cross sectional time series) regressions of monthly abnormal stock returns on the lagged political contribution indexes and other firm characteristics. A firm's abnormal return

is calculated as the difference in the stock's return in month *t*, minus the return to the characteristic matched portfolio in month *t*.[11] We seek to determine whether firms that support more candidates, have longer relationships with candidates, support more local candidates, and support more powerful candidates earn higher abnormal returns controlling for variables which have been shown to be important predictors of the cross-section (book-to-market equity (BM), capitalization (SIZE), and twelve-month lagged returns (BHRET12) - Fama and French (1992), and Jegadeesh and Titman (1993)). We take the natural log of all the right hand side variables except BHRET12. The contribution measures are standardized to have unit variance in order to facilitate comparisons across the indexes. Since each observation of the dependent variable is a monthly abnormal return and the independent variables are updated annually, the regression residuals will be correlated due to persistence in the independent variables. This results in biased standard errors if OLS or the Fama-MacBeth procedure is used (Petersen (2008)). To account for correlated residuals, we report firm clustered standard errors in all panel regressions in the paper.[12]

The abnormal return panel regression results are reported in Table IV. The results show that the total number of supported candidates ($\ln(PI_{it}^{candidates})$) is related to the cross-section of future abnormal returns for firms participating in the political process. Specifically, firms which support a greater number of candidates earn higher future returns; the t-statistic on the coefficient of the total number of supported candidates is 1.86 in the univariate regression (specification 1) and is 4.78 in the multiple regression (specification 5). The coefficients on ln(SIZE) and BHRET12 are of the usual sign.[13] The coefficient on book-to-market is consistently negative in specifications 5 – 8.[14]

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[11] We follow the methodology outlined in Daniel, Grinblatt, Titman, and Wermers (1997) to calculate benchmark-adjusted returns. We form 125 benchmark portfolios that capture the three stock characteristics of book-to-market equity, size and momentum. We form the benchmark portfolios as follows. At the end of October of year *t*, the universe of NYSE, Amex, and Nasdaq common stocks are sorted into five portfolios based on each firm's capitalization in June of year *t* using June NYSE quintile breakpoints. Firms in each size quintile portfolio are further sorted into quintiles based on their book-to-market ratios from the end of year *t*-1. Finally, the firms in each of the 25 size and book-to-market portfolios are further sorted into quintiles based on their prior twelve-month holding period returns estimated through the end of May of year *t*. Thus we generate 125 benchmark portfolios. We calculate value-weighted monthly returns on each benchmark portfolio from November of year *t* through October of year *t*+1. The benchmark portfolios are rebalanced yearly, at the end of October. Each of the contributing firms is assigned to a benchmark portfolio according to its rank on size, book-to-market, and lagged one-year return as of the end of October of year *t*.

[12] We re-estimate all regressions in the paper using a Fama-MacBeth procedure where standard errors are adjusted for first order autocorrelation in the estimated slope. The results are qualitatively similar and are available upon request.

[13] Firm size is positively correlated with the number of supported candidates (the correlation is 34.9%), which may result in a multicollinearity-induced bias in the point estimates on size and the number of supported candidates in specification 5. We estimate a univariate model with only the number of supported candidates measure and report the results in specification 1. We also estimate a univariate model with SIZE only and find a negative coefficient (t-statistic = -2.29). Finally, we estimate bivariate models with SIZE and each political index and find a consistently negative coefficient on size and a positive coefficient on the political indexes (t-

The regressions in specifications 2 through 4 (univariate models) and 6 through 8 (multiple regression models) examine the robustness of our basic total-candidates measure to the other three political indexes. As might be expected because of their multiplicative construction, the other contribution indexes (equations 2 through 4) are highly correlated with the total candidates measure (correlations range from 0.51 to 0.97). Thus, we estimate monthly return regressions using each political index in a separate regression to rule out bias in the index coefficients from the high degree of correlation across the indexes. The coefficients on the three alternative measures, strength of the relationship (specification 6), ability of the candidate (specification 7), and power of the candidate (specification 8) all obtain statistically significant positive t-statistics (4.36, 4.29, and 4.65, respectively).

The coefficient on the number of supported candidates provides us with a sense of the economic effects of contributions. A one standard deviation increase in the number of supported candidates is associated with about a 14 basis point per month (1.69% per year) higher abnormal return. We find similar results with the other contribution measures; a one standard deviation increase for the strength, ability, and power measures are associated with higher monthly average abnormal returns of between 12 to 14 basis points. These results suggest, for example, that a firm that supports an additional seven home-state candidates earns an extra 1.45% in abnormal returns. For comparison, in specification 5 of Table IV, a one standard deviation increase in ln(BM), ln(SIZE), and 12-month lagged returns predicts a -6, -17, and 23 basis points per month change in abnormal returns, respectively.

A.2 Party, Chamber and Party-Control Effects

Next, we split our sample along political party lines and along House and Senate chambers. The FEC data show that Republican candidates typically receive higher total dollar contributions than do Democrats and that Republican candidates' contributions come from a larger number of supporting firms than do Democrat candidates' contributions, so one might hypothesize that the contribution effect should be greater for firms contributing to Republican candidates.[15] In addition, there are constitutional provisions which state that all revenue raising legislation and appropriations bills must originate in the House. Thus, firms may find that it is more expedient to support House

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statistics on the political indexes range from 3.63 for the strength of the relationship index to 4.06 for the ability index), suggesting that multicollinearity is unlikely to be an issue in our sample.

[14] We get a negative coefficient on book-to-market because we use abnormal returns in these regressions. If we use excess returns (i.e. returns in excess of the risk-free rate) instead, the coefficient on book-to-market is positive.

[15] We find that the average firm supports 39% Democrat candidates and 61% Republican candidates over any five-year period.

members, where potential firm welfare increasing actions may be more readily created. For the Democrat/Republican split, we recomputed each political index by multiplying candidate variables by a party indicator variable: For each Democrat (Republican) candidate, the party indicator variable equals one if the candidate is affiliated with a Democratic (Republican) party and zero otherwise. For the House/Senate split, we recomputed each political index by multiplying candidate variables by a chamber indicator variable: For each candidate in the House (Senate), the chamber indicator variable equals one if the candidate is affiliated with the House (Senate) and zero otherwise.

There is a high degree of correlation across the indexes when we split on party or chamber, since many firms support candidates in both parties and houses. For example, most firms contribute to both Republican and Democrat candidates – we have only 29 (104) firms in the sample that only contribute to Democrats (Republicans). As a result of firms supporting both types of candidates, the correlations among equations 1 through 4 scaled by the Republican and Democrat dummies range from 0.42 to 0.79. Thus, there may be multicollinearity problems in interpreting the coefficients from models that include indexes of both parties or chambers in the same model. To address this issue, we estimate two stage regressions. In the first stage we regress each respective Democrat index (equations 1 through 4) on the respective Republican index and create a Democrat residual series using the errors from the regression. In the second stage, we regress monthly firm abnormal returns against the Republican index and the residual Democrat index. The results from the second stage are reported in panel A.1 of table V. As a robustness check, we reverse the orthogonalization procedure and compute the Democrat and the residual Republican index. The results from monthly regressions of firm abnormal returns against the Democrat and the residual Republican indexes are reported in panel A.2. Finally, we do the same orthogonalization procedure for the House/Senate indexes. The results are reported in panel B.1 for the Senate and the residual House indexes and in panel B.2 for the House and the residual Senate indexes.

The results for the Democrat/Republican regressions indicate that there is an incremental Democrat effect beyond the Republican effect (panel A.1) and little incremental Republican effect beyond the Democrat effect (panel A.2). In panel A.1, the residual Democrat index is always statistically significant (the t-statistic ranges from 2.14 for the power index to 3.49 for the strength of the relationship index) even after controlling for the Republican effect. The converse is not true in panel A.2. The residual Republican index is not statistically significant after controlling for the Democrat effect.

Similarly, the results for the House/Senate regressions indicate that there is an incremental House effect beyond the Senate effect (panel B.1) but no Senate effect beyond the House effect (panel B.2). The residual House index is always statistically significant in panel B.1 (t-statistics range from

3.02 for the number of House candidates index to 4.25 for the ability index) but the residual Senate index is insignificant in panel B.2. Thus, even though contributions to both parties and both chambers are associated with higher returns, contributions to Democrats and House candidates provide information for stock returns above and beyond that provided in contributions to Republicans and Senate candidates.

We examine if there is a party control effect. For example, Jayachandran (2006) documents a significant increase (decline) in the market value of firms contributing to Democrats (Republicans) at the announcement that Senator Jim Jeffords decided to leave the Republican Party in 2001, a decision that transferred control of the Senate from Republicans to Democrats. We note that firms do appear to support a greater number of candidates as a function of which party controls either the House or the Senate. For example, summed across chambers and parties, we find that the per-firm average number of supported candidates for the party in control is 95 and the number of not-in-control candidates is 86. The differences are even greater for the other political indexes: 2892 (1639) for the strength index for in-control (not-in-control) candidates; 10 (5.5) for the ability index for in-control (not-in-control) candidates; and 433 (206) for the power index for in-control (not-in-control) candidates (the differences are all highly statistically significant). We examine if these differences in levels of support are reflected in returns. We recomputed each political index by multiplying candidate variables by a control indicator variable. For each candidate, the control indicator variable equals one if the candidate belongs to the party in control of either chamber and zero otherwise. To control for high correlation between the control and not-in-control indexes (most firms support both types of candidates), we orthogonalize the control index with respect to the not-in-control index similar to the party and chamber orthogonalization above and regress monthly firm returns against the non-control index and the residual control index. The results of the second stage regression do not suggest a control effect in returns; the coefficients on the control residual and non-control indexes in abnormal return regressions are both positive but the differences are not statistically significant.

The previous control tests may lack power because firms tend to support both types of candidates and there were periods over which party control varied across chambers (which may have meant that being in "control" had less of an effect on getting legislation passed than in periods where the same party controlled both chambers). A convenient "natural experiment" to test for party control is to examine contribution effects after the 1994 elections in which Republicans strongly won control of both the House and Senate. We reestimate the panel regressions in the post-1994 period for the Republican and Democrat residual indexes. The results indicate no real differences across the party indexes. For example, the t-statistic for the coefficient on the Democratic (Republican) ability index is 2.58 (2.75) during the post-1994 period. Thus, there is no clear evidence that only Republican

leaning firms earned higher abnormal returns during the post-1994 Republican-controlled era.[16] Our result of no consistent differences in contribution effects between Republican and Democratic leaning firms across periods of Democratic and Republican control is consistent with the Grossman and Helpman (1994) argument that firms lobby incumbent politicians who already hold public office irrespective of those politicians' election platforms. The Grossman and Helpman model builds on the Stigler (1971) theory of economic regulation that views political contributions not as a means to affect the election outcome per se, but as a means to purchase political support from the candidate already in office.

A.3 Robustness Tests

We perform a number of robustness tests. To mitigate the potential effects of possible microstructure biases emanating from the use of CRSP monthly closing prices, we use geometrically compounded annual abnormal returns (instead of the typical monthly abnormal returns) as the dependent variable in the cross-sectional regressions. We find that our results are robust; the t-statistics on the coefficients from the four contribution indexes range from 2.55 for the ability measure up to 4.07 for the power of the candidate measure. We replace characteristic based benchmark adjusted abnormal returns with a simpler excess returns (in excess of the T-bill rate). Using excess returns as the dependent variable instead of benchmark adjusted returns produces qualitatively similar results. We examine variations to the October rebalancing convention: We recompute the political indexes at the end of June of year *t*, and line up the index values with returns from July of year *t* to June of year *t*+1. We also recompute the political indexes at the end of December of year *t*, and line up the index values with returns from January of year *t*+1 to December of year *t*+1. Our results are robust to variations in the rebalancing convention; t-statistics on the coefficients from the four contribution indexes range from 3.41 for the number of supported candidates index up to 4.36 for the ability index for the June – July convention and range from 4.21 for the strength of the relationship index up to 5.51 for the ability index for the January – December convention. Also, our results are unchanged using BM and size updated in October of year *t*. We examine variations to the lagged returns variable used in our regressions: we replace monthly updated lagged 12 month returns with 6, 12 or 36-month annually updated returns and monthly updated 6 or 36-month returns and find that the significance of the PI coefficients are robust.

To explore whether our documented hard-money-based contribution effects are driven by non-candidate specific soft money contributions, we estimate regressions of the four political indexes from 2003 to 2005, a period over which soft-money contributions from corporations were banned. If

[16] We also estimate regressions in which we interact candidate party and chamber affiliation with the control/non-control indexes. These regressions do not suggest a control/non-control effect in returns.

soft-money contributions are a significant source of the contributions effect, we would expect to see less of an effect after 2002. We find that the coefficients on the four indexes are actually larger in the post 2002 period than in the previous periods (but as expected, due to the short time series, are less statistically significant), consistent with the observations that 1) the contribution effect in stock returns prior to 2002 was not due solely to non-candidate specific soft-money contributions, and 2) that the contribution effect remains strong in the most recent years of our sample.

We control for charitable giving. High amounts of charitable giving may signal that a firm's managers have private information concerning positive future performance (Margolis, Elfenbain, Walsh (2007) and Navarro (1988)). However, large charitable contributions may also signal an agency problem in which a manager is simply engaged in wasteful spending (Jensen and Meckling (1976) and Wang and Coffey (1992)). The first (second) hypothesis suggests that charitable giving may be positively (negatively) correlated with future returns. Either way, if charitable giving is correlated with political contributions and future firm performance, then it may bias our results, so it is important to control for it in our tests. We obtain data from KLD Research and Analytics, Inc. on firm charitable giving. The KLD data is from 1991 to 2005 and provides coverage on S&P 500 firms from 1991-2000 and expands after 2001 to include Russell 1000 firms. We use an indicator variable for Generous giving, which equals to one if a firm has consistently given over 1.5% of trailing three-year net earnings before taxes to charity and zero otherwise. KLD updates the data annually at the end of the calendar year. We merge the charitable giving variable from year end *t*-1 with firm monthly returns from November of year *t* to October of year *t*+1. We re-estimate the panel regressions in Table IV using lagged charity, the political contribution index, and the other control variables (book-to-market equity (BM), capitalization (SIZE), and twelve-month lagged returns (BHRET12)) as explanatory variables. Despite the fact that we now have a shorter sample (starting in 1991) and a reduced number of firms, we find that charity does not subsume the political indexes: the t-statistics on charity are statistically significant and the t-statistics on the coefficients of the political indexes remain significant (t-statistics range from 2.03 for the strength of the relationship index to 3.02 for the power index).

We control for firm age. Newly listed firms are smaller and may have extra cash on hand from their initial public offerings, and so may be less likely to participate in the political process, at least initially, which may result in less of a political contribution effect for these firms.[17] We re-estimate our panel regressions of Table IV by including firm age as an independent variable. The

[17] In our sample, the average (median) firm age, defined as the number of years since the year with the first non-missing value of shares outstanding on CRSP, increases monotonically from 18 (15) years for firms in decile one of the number of supported candidates index to 44 (50) years for firms in decile ten of the index. Thus, we are dealing mostly with mature firms in our sample.

coefficient on age is negative and significant, and the significance of the political indexes is relatively unchanged: the t-statistics on the coefficients of the four PIs range from 4.59 for the ability index to 5.25 for the number of supported candidates index.[18]

Finally, we test for the presence of the contribution effect in firms' operating performance (ROE) and firm value (market-to-book). The results of these tests are consistent with our return tests; we find in general positive and significant loadings on the political contribution indexes.

B. Political Contribution Portfolios

In this section, we create political index weighted portfolios. We form the portfolios by weighting each firm by its relative value of a given political contribution index. Thus, firms that have a larger value of a given political index are given a larger weight in a portfolio. The portfolios are rebalanced once a year, at the end of October. The weight given to stock i in the portfolio from November of year t to October of year t+1 is:

$$w_{it}^{p} = \frac{PI_{it}^{p}}{\sum_{i=1}^{N} PI_{it}^{p}} \tag{5}$$

where p equals the portfolio for a particular political index (equations 1 through 4), and PI_{it}^{p} is the political index value for firm i (where i= 1, 2,… N) in October of year t. After forming the portfolios, we obtain a time series of monthly returns to each portfolio from November of 1984 to October of 2005. We regress the time series of portfolio returns in excess of the risk free rate on the excess VW market returns, the three-factor model (MKT, SMB, and HML) and the Fama-French-Carhart four-factor model (MKT, SMB, HML, and UMD) and report the intercepts in Table VI.

We find that the political contribution portfolios earn positive abnormal returns and that the evidence of abnormal returns is robust to the four political indexes. Across the four PI-weighted portfolios, the CAPM alphas range from 39 to 48 bps, the three-factor alphas range from 7 to 11 bps, and the four-factor alphas range from 18 to 22 bps. The CAPM and four-factor alphas are all statistically significant, but the three-factor alphas, while exhibiting positive intercepts, are not statistically significant (t-statistics range from 0.93 to 1.44). The PI portfolios have market betas close to one, low loadings on SMB (betas range from -0.05 to 0.11), moderate to high loadings on HML (from 0.51 to 0.63), and negative loadings on UMD (from -0.10 to -0.12). Using the loadings from Table I of Fama and French (1996) as a benchmark, the politically active firms match up closely

[18] We perform other robustness tests but do not report the results in the interest of space. In these tests we analyze further the source of the contribution effect. We also analyze the contribution effect by industry. The effect is present in all of these tests. The results are available upon request.

to large cap firms with a tilt towards value, consistent with our results in Table III that politically active firms are larger firms with slightly greater BM ratios. In addition, the negative loadings on UMD suggest that the firms in our sample are experiencing return reversals, potentially arising from their involvement in the political process. Overall, the factor models are not able to explain the returns to politically active firms.

We perform further tests to evaluate the risk of the political contribution portfolios. First, we follow Lakonishok, Shleifer, and Vishny (1994) and examine the performance of the political contribution stocks in up and down market states. If political stocks are more risky than non-political stocks, we should see that the political contribution stocks perform relatively worse in down market periods. In contrast, if stocks with political connections garner some degree of an insurance effect from their involvement with politicians, then one might expect them to perform better relative to non-contributors in down market periods. We form a long minus short portfolio composed of a value-weighted portfolio of all firms with PACs minus a value-weighted portfolio of all non-PAC firms. This portfolio earns an unconditional return of 10 basis points, but more importantly, earns 90 basis points per month when the VW excess market return is less than zero, and -38 basis points when the market return is greater than or equal to zero (the difference is statistically significant, with a t-statistic = 3.7). This result suggests that politically active firms may enjoy a greater level of "protection" in down market states, consistent with Gordon, Hafer, and Landra's (2007) theory that political giving may serve as a form of insurance.

Second, we follow Petkova and Zhang (2005), Jagannathan and Wang (1996) and others and examine the covariation of the political portfolio's beta with the expected market risk premium in a conditional CAPM framework. We create an expected market risk premium using a standard set of four business cycle variables (i.e., the default premium, the term premium, the dividend yield, and the short-term Treasury bill rate). We regress the VW market excess monthly returns on the four business cycle variables and then multiply the resulting parameter estimates by monthly realizations of the business cycle variables to generate an expected monthly market risk premium. Next, we estimate a conditional beta for the spread portfolio (composed of a value-weighted portfolios of all firms with PACs minus a value-weighted portfolio of all non-PAC firms) using the four business cycle variables. We regress the monthly portfolio returns on the monthly return of the market scaled by the business cycle variables. The resulting parameter estimates from the regression are multiplied by monthly realizations of the conditioning variables to generate a monthly conditional beta. Finally, we estimate a "beta-premium sensitivity" for the spread portfolio by regressing the time series of the conditional beta on the monthly expected market risk premium. If the time-series variation in the political contribution portfolio is consistent with a conditional CAPM risk-based story, then we would

expect a positive and significant beta premium sensitivity (i.e., the portfolio's beta should be higher in more risky states of the world). We find the beta-premium sensitivity is -1.42 (t-statistic = -1.98), suggesting that the political contribution based portfolio is actually less risky in times of high marginal utility of consumption. Thus, these tests do not suggest that politically active firms are riskier firms.

C. Endogeneity

Our evidence on the positive association between corporate political contributions and stock returns appears to be robust and is, at least to us, thought provoking. Because firms do not decide to participate in the political process randomly, our results are not necessarily generated by a causal relationship. It is equally likely that contributing firms are simply better firms, a fact that is reflected in their stock price performance. To establish a causal relationship from contributions to returns, we would have to rule out the alternative explanation. We attempt to tackle this difficult task in this section. Our results should be viewed as merely suggestive, however, since rigorous treatment of this problem is outside the scope of this paper. Our intent is to provide some preliminary evidence in the hope that future research will help to resolve this issue.

We begin by pointing to a growing body of literature that looks for a source of firm value from political connections. Goldman, Rocholl, and So (2008) document that companies connected to a winning party are more likely to obtain procurement contracts. Karpoff, Lee, and Vendrzyk (1999) document that influential government contractors (those with the largest dollar volume of contracts) are penalized much less severely when they commit fraud in an attempt to deceive the government. Claessens, Feijen, and Laeven (2008) report that Brazilian firms making political contributions to elected federal deputies earn higher stock returns and substantially increase their bank financing relative to a control group after elections, suggesting that access to bank capital is an important source of value. Faccio, Masulis, and McConnell (2006) document that politically connected firms are much more likely to get bailed out in bankruptcy. While this evidence is consistent with political connections serving as a source of value, it is not necessarily inconsistent with politically connected firms being better firms. Thus, we are cautious about overinterpreting these results and simply view these aforementioned papers as plausible economic explanations supporting a causal effect between contributions and returns.

C.1. A natural experiment

If an exogenous shock takes place that changes the contribution behavior of firms but is not correlated with changes in future returns, then it is possible to use that shock to identify possible

causal linkages between contributions and returns. We search for such a shock and identify changes in allocations of House representatives to states based on Census counts of US population. Representatives in the House are allocated to states proportionally as a function of state population, so states that experience a large increase (decrease) in state population are allocated more (fewer) representatives. Firms making political contributions should respond to these allocation changes by changing their contribution practices (the number of local candidates that they support, for example), which, in turn, should affect firm returns, if there is a causal link between contributions and returns. We have two Censuses during our sample period, 1990 and 2000, so we study changes in contribution effects from two years before to two years after each Census for all firms headquartered in states that experienced a reallocation of representatives.

We find a marginally significant increase (decrease) in the contribution effect for state-Censuses with an increase (decrease) in the number of House representatives from before to after the Census. For example, the coefficient on the number of supported candidates measure increases from -0.0002 during pre-Census years to 0.0040 during post-Census years for state-Censuses with an increase in the number of House representatives (p-value for the difference in coefficients is 0.103). Similarly, the coefficient on the number of supported candidates decreases from 0.0017 during pre-Census years to -0.0004 during post-Census years for state-Censuses with a decrease in the number of House representatives (p-value for the difference is 0.317). The results for other contribution measures are similar. When we further condition on only those firms that contribute to the maximum number of state representatives prior to the Census (i.e. those firms for which the contribution constraint is binding) we find an even stronger result. The coefficient on the number of supported candidates measure increases from 0.0041 during pre-Census to 0.0167 during post-Census for state-Censuses with an increase in the number of House representatives (the p-value for the difference is 0.083). The results for other contribution measures are equally stronger.

A caveat to our methodology is that it still could be the case that firm performance and population changes are endogenous. Deterioration in state economic conditions affects firm performance and people's decision to migrate out of the state to other places with better economic conditions. The resulting population changes affect the distribution of politicians across states and, therefore, firms' contribution practices. While this explanation is plausible, we think it is less likely. First, Korniotis and Kumar (2008) document that deterioration in state economic conditions is associated with *higher* future state-specific returns. Under the reverse causality explanation above (i.e. returns cause contributions), we would expect to find lower returns following deterioration in state economic conditions. Second, when we regress value-weighted state returns against percentage

changes in population, we do not find a statistically significant relationship (t-statistic = 0.61). Taken together, this suggests that the reverse causality is unlikely to be an issue here.

C.2. Instrumental variables

We use an instrumental variables approach in an attempt to deal with endogeneity issues A proper implementation of instrumental variable approach requires identifying a valid instrument. For an instrument to be valid, it should be both relevant (the variation in the instrument should be related to the variation in the endogenous right hand side variable in the main regression) and exogenous (the part of the right hand side variable captured by the instrument has to be exogenous).[19] As an attempt to come up with an instrument that satisfies these two conditions, we propose two alternative instruments for our PI variables: (i) the number of House Representatives in the firm's state and (ii) the number of firm employees. A higher number of state candidates gives greater opportunity to firms to participate in the political process especially when it comes to contributing to local politicians. A higher number of firm employees increases the amount of capital at firm PAC's disposal since PACs receive money from firm employees and individuals directly affiliated with the firm. Although we cannot rule it out completely, there is little economic reason to suspect *a priori* that both of these instruments are systematically related to abnormal firm returns.[20] To check the validity of the proposed instruments we perform the following formal tests on instrument relevance and exogeneity. We first regress each PI measure on a proposed instrument and use the F-statistic from this regression to test the relevance of the instrument. An F-value less than 10 indicates that the instrument is weak (not relevant) resulting in a biased estimate in the second stage (Stock and Watson, 2003). The last column in table VII reports the F-statistics from the first stage regressions where the PIs are regressed on a single instrument. For the number of Representatives instrument in Panel A, the instrument is relevant for three of our PI measures except for the strength PI. For the number of employees instrument, reported in Panel B, the F-statistics is considerably higher than 10 for all the PI measures. Thus, using the standard weak instrument F tests we reject the null hypothesis that the instruments are weak. After establishing the relevance criterion, we compute the predicted values of our PI measures by regressing each PI measure on one of the instrument and the control variables (BM, Size, and BHRET12). These predicted values are then used in the second-stage regressions where abnormal returns are regressed on the control variables and the predicted

[19] See Chapter 9 of Greene (2008) and Chapter 10 of Stock and Watson (2003).

[20] The number of employees variable is positively correlated with firm size. To the extent that firm size is correlated with future abnormal returns, one might question whether the number of employees is an exogenous instrument. To check if this is a problem, we regressed the number of employees on firm size and used the residual from this regression as a separate instrument. The results are qualitatively similar to the raw number of employees instrument.

values of the endogenous PI measures. To test for instrument exogeneity, we regress the residuals from the second-stage regressions on a constant, two of the instruments and the control variables. With two instruments and a single endogenous regressor for each PI, the resulting J-statistic for the test of overidentifying restriction will be the same as the F-values obtained from this regression.[21] This has a Chi-square distribution with one degree of freedom with 5% (10%) critical value of 3.84 (2.71). The J-statistics from our regressions are 0.54 for the number of supported candidates, 1.30 for the strength of the relationship index, 0.30 for the ability index, and 0.96 for the power. Thus, the J-statistics fail to reject the null hypothesis that both instruments are exogenous (i.e., the instruments are not correlated with the error term in our main regression). Having already established the relevance of the instruments with high F-values in the first stage, these tests confirm the validity of both of the instruments.

Table VII reports the instrumental variable results. The parameter estimates of the second-stage regressions are reported in the first eight columns of Table VII. For both instruments, the predicted political indexes are reliable predictors of the cross-section; the t-statistics on the coefficients range from 2.77 to 5.03 providing support for our previous finding of a positive association between the political indexes and future abnormal returns. Overall, the results of these tests suggest that after controlling for simultaneous causality bias, firm political contributions appear to lead to future abnormal returns.

IV. Conclusions

Ansolabehere, de Figueiredo, and Snyder (2003) argue that political contributions should not be viewed as investment in the political process but merely as a form of consumption good. Their argument is built around the apparent paradox of campaign financing – if political contributions serve as investment in the political process, the rate of return earned on that investment appears astronomically high (Tullock (1972, 1980)). If we assume that the value of the hard-money contributions we use in this paper is the true total cost for firms participating in the political process, then our results also suggest an extremely high rate of return for firms participating in the political contribution process.[22] Of course, another story is that the true costs for firms to participate in the

[21] If both instruments are exogenous, then their coefficients will be close to each other once they are used in the same regression. If the parameter estimates for these instruments are significantly different from each other, then either one or both of the instruments is not exogenous. The test of overidentifying restriction makes this comparison using the F-statistics to test whether the coefficients of the instruments are jointly equal to zero. See pages 353-354 in Stock and Watson (2003) for the details of this test.

[22] In our sample, firms invest an average total contribution amount per year of $23,471 and earn an average increase in shareholder wealth of $163.8M per year (i.e., the average annual increase in four-factor model abnormal shareholder wealth is 21 basis points x 12 months x average firm capitalization of $6.5B = $163.8M.

political process are greater than the costs of hard-money contributions, and potentially include other off-the-books contributions or non-money favors, for which only large firms can afford to pay. Milyo, Primo, and Groseclose (2000) show that large PAC contributors spend 20 to 60 times more on lobbying expenses than they do on hard money contributions. Similarly, Bombardini and Trebbi (2008) report that lobbying expenditures totaled $2.59 billion in 2006 compared to $345 million donated in campaign contributions from all interest groups during the 2005-2006 election cycle. In our sample, corporations are responsible for 9.8% of all campaign contributions, which implies that total corporate campaign giving was approximately $33.8 million during the 2005-2006 election cycle. Based on this data, corporations spend roughly 77 times more on lobbying than they do on campaign contributions ($2.59 billion / $33.8 million).[23] Alternatively, it is possible that politicians find it most beneficial to grant favors to large firms because those are the firms that generate the largest amount of tax revenues and jobs. For example, Bertrand et al (2004) find that firms managed by connected CEOs in France create more jobs in more politically contested areas, and that this is especially the case around election years.

In this paper, we capture the effectiveness of firm participation in the political process with a unique portfolio approach of how many candidates a firm supports. Using this measure, we document a strong correlation between the number of candidates that a firm supports and the firm's future abnormal returns. We also attempt to address potential causality problems (i.e., do returns cause contributions or do contributions cause returns); we consider a natural experiment and an instrumental variables approach and show that the positive correlation between the number of candidates that a firm supports and the firm's future abnormal returns is consistent with firm political participation causing future abnormal returns. Thus, our results are consistent with the idea that firms may participate in the political system not from the standpoint of consuming a patriotic consumption good, as suggested in Ansolabehere, de Figueiredo, and Snyder (2003), but rather from the standpoint of creating positive net present value investments.

[23] In addition, Cheung, Yan-Leung Jing, Rau, and Stouraitis (2006) argue that governments can obtain resources from firms in the forms of bribes and other payoffs.

Appendix A: Campaign Finance Law

This appendix provides a brief historical overview of campaign finance laws in the United States. While these laws are rather extensive, we focus primarily on provisions dealing with disclosure requirements and contribution and spending limits by candidates and political parties.

A.1. The Federal Election Campaign Act of 1971

As early as 1905, President Theodore Roosevelt, recognizing the need for regulating the financing of federal election campaigns, called for a ban on corporate contributions for political purposes. As a result, the U.S. Congress has passed several statutes between 1907 and 1971 that collectively were designed to limit the disproportionate influence of wealthy individuals and special interest groups on the outcome of federal elections. For example, in the Act of August 19, 1911, Congress banned all corporate contributions to political parties and imposed disclosure requirements on political contributions and expenditures. Over the next half-century, the ban was extended to other organizations including labor unions and trade associations. However, these rules were not comprehensive enough and were rarely strictly enforced (Ansolabehere, de Figueiredo, and Snyder (2003)).

The Federal Election Campaign Act (FECA), passed by Congress in 1971, was the first comprehensive set of rules governing public funding of federal elections. It also provided for a detailed set of disclosure requirements for candidates and political parties. Congress amended the Act in 1974 following the Watergate scandal setting strict limits on contributions by individuals, political parties and special interest groups. The 1974 amendment also created an independent agency, the Federal Election Commission (FEC), to enforce the campaign finance law.

According to FECA, candidates seeking a federal office may create their own candidate campaign committees. National parties may create party committees. Both types of committees must be registered with the FEC and report to the FEC all contributions in excess of $200 made to them by individuals and special interest groups. Special interest groups may include corporations, labor unions, trade organizations and other interest groups.

For the purposes of transparency, special interest groups must create (and register with the FEC) their own political action committees (PACs) and make contributions to national parties or candidates only through these committees. The sponsoring interest groups are not allowed to contribute to their own PACs but may cover PACs' start-up, administrative and fundraising expenses. PACs may solicit contributions only from individuals associated with the sponsoring organization. In the case of corporate PACs, only individuals directly employed by the firm may contribute to the firm's PAC, with most of contributions coming from the firm's top managers.

FECA established strict limits on contributions by individuals and special interest groups (which include corporations) to candidates, party committees and PACs. For each two-year election cycle, PACs have been allowed to contribute up to $10,000 to a candidate per election ($5,000 contributed during a primary election and $5,000 contributed during a general election). Individuals have been allowed to contribute up to $2,000 to a candidate ($1,000 during a primary and $1,000 during a general election), up to $5,000 to any special interest PAC and up to $20,000 to a party committee. Finally, FECA imposed a $25,000 limit on the total amount of political contributions made by individuals. No limit was set on the total number of candidates which special interest PACs may support.

Despite the existing contribution limits, individuals and special interest groups could contribute unlimited amounts during elections by using two important exceptions. First, individuals and interest groups were allowed to spend unlimited amounts in "independent expenditures" in support of or against political candidates. To qualify as "independent expenditures", these expenditures could not be coordinated with candidate or party campaigns. Second, individuals and interest groups could contribute unlimited amounts to political parties in "soft-money" contributions. These contributions, established under the 1979 amendment to FECA, were intended to be used on voter registration expenses and on "get out the vote" campaigns. Quickly, however, the parties began

to use soft money for party building and other administrative expenses. Perhaps more controversially, political parties began using soft money on issue advertising, which amounted to supporting or criticizing particular candidates running for office.

A.2. The Bipartisan Campaign Reform Act of 2002

By many accounts, FECA has not been very successful in limiting the role of wealthy individuals and special interest groups in the election outcomes. The use of "independent expenditures" and soft money by the wealthy has allowed them to advance their agenda in federal elections. In early 2002, in part influenced by the spectacular collapse of Enron (a major political contributor in federal elections), Congress passed the Bipartisan Campaign Reform Act (BCRA), which significantly altered the campaign finance system in the US.

Two of the most important changes introduced by the Act are the ban on all soft money contributions and the increase in contribution limits. The limit on contributions from individuals directly to political candidates was doubled from $2,000 per election cycle to $4,000 per election cycle. The individual contribution limit to party committees was increased from $20,000 to $25,000 per election cycle, and the contribution limit to state or local PACs was increased from $5,000 to $10,000 (there was no change in the individual contribution limit to other special interest PACs). Finally, the limit on total individual contributions was increased from $25,000 to $95,000 per election cycle. Contribution limits from special interest PACs to candidates and political parties were not changed.

The BCRA also limited the use of independent expenditures for issue advertising. Under the new issue advertising restrictions, special interest groups cannot pay for any advertisement that identifies a federal candidate within 30 days of a primary election or within 60 days of a general election. Any advertisement that does identify a federal candidate within those time periods must be paid for with regulated "hard-money" contributions or with contributions coming directly from individuals.

Appendix B

The variables used in the paper are listed below (with Compustat data items in parenthesis).

Market value (SIZE) is the price per share times shares outstanding at the end of June of calendar year *t*.

Book-to-market equity (BM), for the fiscal year ending in calendar year *t*, is as defined in Davis, Fama, and French (2000) where book equity (BE) is the stockholders book equity (data60), plus balance sheet deferred taxes and investment tax credit (data35), minus book value of preferred stock (in the following order: data56 or data10 or data130) and ME is the price times shares outstanding at the end of December of calendar year *t*.

ASSETS is total assets (data6)

ROE is income before extraordinary items (data18) scaled by total common equity (data60)

Leverage is the sum of long-term debt and debt in current liabilities, scaled by total assets [data9 + data34)/data6]

BHRET12 is monthly updated twelve month buy-and-hold return $[(1+r_1) \times ... \times (1+r_{12})-1]$ where r_i is the return in month *i*

BHRET36 is the 3-year buy-and-hold return over July (t-3) to June (t) $[(1+r_1) \times ... \times (1+r_{36}) -1]$ where r_i is the return in month *i*

Cash Flow (CF), as used in Titman, Wei, and Xie (2004). It is defined as Cash Flow =(Operating income before depreciation - interest expenses - taxes - preferred dividends - common dividends)/total assets [data13-(data15+data16+data19+data21)]/data6

Tobin's Q market value in fiscal year t measured as price times number of shares outstanding at the end of fiscal year *t* (data199*data25) divided by book equity (BE) in fiscal year *t*.

EMPLOYEES is the number of employees in millions (data 29)

PROFIT is operating income before depreciation scaled by lagged total assets (data13/data6)

References

Abrams, Jim, 2006, New House Rule: ID Special Projects, *The Salt Lake Tribune*, September 15, 2006.

Andres, Gary J., 1985, Business involvement in campaign finance: Factors influencing the decision to form a corporate PAC, *PS* 18, 156 – 181.

Ansolabehere, Stephen and James M. Snyder Jr., 1999, Money and institutional power, *Texas Law Review* 77, 1673 – 1704.

Ansolabehere, Stephen, John M. de Figueiredo, and James M. Snyder Jr., 2003, Why is there so little money in U.S. politics?, *Journal of Economic Perspectives* 17, 105 – 130.

Ansolabehere, Stephen and James M. Snyder Jr., and Michiko Ueda, 2004, Did Firms Profit from Soft Money?, *Election Law Journal*, 3, 193 -198.

Barta, Patrick, 2006, South Africa turns coal into oil, and China looks to tap expertise; Partly state-owned Sasol, Beijing meet to plan a local facility; CO2 emissions are an issue, *The Wall Street Journal Asia*, August 17, 2006.

Benmelech, E. and T. Moskowitz, 2006, The Political Economy of Financial Regulation: Evidence from U.S. Senate Usury Laws in the 18th and 19th Century, *Working paper*.

Bertrand, Marianne, Francis Kramarz, Antoinette Schoar, and David Thesmar, 2004, Politically connected CEOs and corporate outcomes: Evidence from France, *Working paper*.

Bombardini, Matilde and Francesco Trebbi, 2008, Competition and political organization: Together or alone in lobbying for trade policy?, *Working paper*.

Burns, Nancy et al., 2001, American national election study, 2000: Pre- and post-election survey, University of Michigan, Center for Political Studies [Computer file], 2nd ICPSR version.

Cheung, Steven, Yan-Leung Jing, Lihua, Rau, P. Raghavendra and Stouraitis, Aris, 2006, How Does the Grabbing Hand Grab? Tunneling Assets from Chinese Listed Companies to the State, *Working paper*.

Claessens, Stijn, Erik Feijen, and Luc Laeven, 2006, Political connections and preferential access to finance: The role of campaign contributions, *Journal of Financial Economics,* forthcoming.

Drinkard, Jim, 2006, Private Jet Perks for Lawmakers Debated, *The Salt Lake Tribune*, March 9, 2006.

Daniel, K., M. Grinblatt, S. Titman, and R. Wermers, 1997, Measuring mutual fund performance with characteristic-based benchmarks, *Journal of Finan*ce 52, 1035-1058.

Durden, Garey C., Jason F. Shorgen, and Jonathan I. Silberman, 1991, The effects of interest group pressure on coal strip-mining legislation, *Social Science Quarterly* 72, 239 – 250.

Evans, W. and I. Kessides, 1993, Localized market power in the U.S. airline industry, *Review of Economics and Statistics* 75, 66 – 73.

Faccio, Mara, 2006, Politically connected firms, *American Economic Review* 96, 369 – 386.

Faccio, Mara and David C. Parsley, 2006, Sudden deaths: Taking stock of political connections, *Working paper*.

Faccio, Mara, Ronald W. Masulis, and John J. McConnell, 2006, Political connections and corporate bailouts, *Journal of Finance*, forthcoming.

Fama, Eugene F. and Kenneth R. French, 1992, The cross-section of expected stock returns, *Journal of Finance* 47, 427 – 465.

Fama, Eugene F. and Kenneth R. French, 1993, Common risk factors in the returns on stocks and bonds, *Journal of Financial Economics* 33, 3 – 56.

Fama, Eugene F. and Kenneth R. French, 1996, Multifactor explanation of asset pricing anomalies, *Journal of Finance 51*, 55-4

Fama, Eugene F. and Kenneth R. French, 2002, Testing tradeoff and pecking order predictions about dividends and debt, *Review of Financial Studies* 15, 1 – 33.

Fama, Eugene F. and J. D. MacBeth, 1973, Risk return and equilibrium: Empirical test, *Journal of Political Economy* 81, 607 – 636.

Fisman David, Ray Fisman, Julia Galef, and Rakesh Khurana, 2006, Estimating the value of connections to Vice-President Cheney, *Working paper*.

Fisman, Raymond, 2001, Estimating the value of political connections, *American Economic Review* 91, 1095 – 1102.

Greene, William H., Econometric Analysis (New York, NY: Prentice Hall, 2008)

Goldman, Eitan, Jörg Rocholl, and Jongil So, 2006, Does political connectedness affect firm value?, *Review of Financial Studies*, forthcoming.

Goldman, Eitan, Jörg Rocholl, and Jongil So, 2008, Political connections and the allocation of procurement contracts, *Working paper*.

Gordon, Sanford, Catherine Hafer, and Dimitri Landa, 2007, Consumption or Investment? On Motivations for Political Giving, Journal of Politics, 69, 1057-1072.

Grier, Kevin B. and Michael C. Munger, 1991, Committee assignments, constituent preferences, and campaign contributions, *Economic Inquiry* 29, 24 – 43.

Grier , Kevin B., Michael C. Munger, and Brian E. Roberts, 1994, The Determinants of Industry Political Activity, 1978-1986, *The American Political Science Review*, 88, 911-926.

Grossman, Gene M. and Elhana Helpman, 1994, Protection for sale, *American Economic Review* 84, 833 – 850.

Hart, David M., 2001, Why Do Some Firms Give? Why Do Some Give a Lot?: High-Tech PACs, 1977-1996, *Journal of Politics* 63, 1230-1249.

Hirsch, Barry T. and David A. Macpherson, 2003, Union membership and coverage database from the Current Population Survey: Note," *Industrial and Labor Relations Review* 56, 349-54.

Ivins, Molly, 2006, Corporate Fraud and Government Complicity, *The Salt Lake Tribune*, May 31, 2006.

Jagannathan, R., and Z. Wang, 1996, The conditional CAPM and the cross-section of expected returns, *Journal of Finance* 51, 3-53.

Jayachandran, Seema, 2006, The Jeffords effect, *Journal of Law and Economics*, forthcoming.

Jegadeesh, Narasimhan and Sheridan Titman, 1993, Returns to buying winners and selling losers: Implications for stock market efficiency, *Journal of Finance* 48, 65 – 91.

Jensen, Michael and William Meckling, 1976, Theory of the firm: Managerial Behavior, agency costs, and ownership structure, *Journal of Financial Economics*, 3, 305-360.

Karpoff, J., D. S. Lee, V. Vendrzyk, 1999, Defense Procurement Fraud, Penalties, and Contractor Influence, *Journal of Political Economy* 107, 809-842.

Kaufmann, D., A. Kraay, and M. Mastruzzi, 2003, Governance Matters III: Governance Indicators for 1996-2002, working paper, The World Bank.

Knight, B., 2006, Are policy platforms capitalized into equity prices? Evidence from the Bush/Gore 2000 Presidential Election, forthcoming in *The Journal of Public Economics*.

Koenker, R. and G. Bassett, 1978, Regression quantiles, *Econometrica* 46, 107 – 112.

Korniotis, G. M. and A. Kumar, 2008, Long Georgia, short Colorado? The geography of return predictability, working paper.

Kroszner, Randall S. and Thomas Stratmann, 1998, Interest-group competition and the organization of Congress: Theory and evidence from financial services' political action committees, *American Economic Review* 88, 1163 – 1187.

Lakonishok, Josef and Inmoo Lee, 2001, Are insider trades informative?, *Review of Financial Studies* 14, 79 – 111.

Lakonishok, J., A. Shleifer, and R. Vishny, 1994, Contrarian Investment, Extrapolation, and Risk, *Journal of Finance* 49, 1541-1578.

Langbein, Laura I. and Mark Lotwis, 1990, The political efficacy of lobbying and money: Gun control in the U.S. House, 1986, *Legislative Studies Quarterly* 15, 413 – 440.

Leuz, Christian and Felix Oberholzer-Gee, 2006, Political relationships, global financing, and corporate transparency: Evidence from Indonesia, *Journal of Financial Economics* 81, 411 – 439.

Margolis, Joshua, Hillary Elfenbain, and James Walsh, 2007, Does it pay to be good?

A meta-analysis and redirection of research on the relationship between corporate social and financial performance, *Working paper*.

Masters, Matrick F. and Gerald D. Keim, 1985, Determinants of PAC participation among large corporations, *Journal of Politics* 47, 1158 – 1173.

McIntire, Mike, 2006, Campaign Gifts from Big Insurer Elude the Limit, *New York Times*, September 19, 2006.

Milyo, Jeffrey, David Primo, and Timothy Groseclose, 2000, Corporate PAC campaign contributions in perspective, *Business and Politics*, 2, 75-88.

Navarro, Peter, 1988, Why do corporations give to charity?, *The Journal of Business*, 61, 65-93.

Petersen, Mitchell, 2007, Estimating standard errors in finance panel data sets: Comparing approaches, working paper, Northwestern University.

Petkova, R. and Zhang, L., 2005, Is value riskier than growth?, *Journal of Financial Economics*, 78, 187-202.

Roberts, Bryan E., 1990, A dead senator tells no lies: Seniority and the distribution of federal benefits, *American Journal of Political Science* 34, 31 – 58.

Romer, Thomas and James M. Snyder Jr., 1994, An empirical investigation of the dynamics of PAC contributions, *American Journal of Political Science* 38, 745 – 769.

Sanra-Clara, Pedro and Rossen Valkanov, 2003, The presidential puzzle: Political cycles and the stock market, *Journal of Finance* 58, 1841 – 1872.

Shon, John J., 2006, Do stock returns vary with campaign contributions? The Bush versus Gore presidential elections, *Working paper*.

Smith, R. A., 1995, Interest group influence in the U.S. Congress, *Legislative Studies Quarterly* 20, 89 – 139

Snyder, James M. Jr., 1990, Campaign contributions as investments: The House of Representatives, 1980 – 1986, *Journal of Political Economy* 98, 1195 – 1227.

Snyder, James M. Jr., 1992, Long-term investing in politicians, or give early, give often, *Journal of Law and Economics* 35, 15-43

Stigler, George J., 1971, The theory of economic regulation, *Bell Journal of Economics* 2, 359 – 365.

Stock, J.H., and M. Watson, Introduction to Econometrics (Boston, MA: Addison Wesley, 2003)

Stratmann, Thomas, 1991, What do campaign contributions buy? Deciphering causal effects of money and votes, *Southern Economic Journal* 57, 6060 – 320.

Stratmann, Thomas, 1995, Campaign contributions and congressional voting: Does the timing of contributions matter?, *Review of Economics and Statistics* 77, 127 – 136.

Stratmann, Thomas, 1998, The market for congressional votes: Is timing of contributions everything?, *Journal of Law and Economics* 41, 85 – 113.

Stratmann, Thomas, 2005, Some talk: Money on politics. A (partial) review of the literature, *Public Choice* 124, 135 – 156.

Titman, S., K. Wei, and F. Xie, 2004, Capital Investments and Stock Returns, *Journal of Financial and Quantitative Analysis*, 39, 677-700.

Tullock, Gordon, 1972, The purchase of politicians, *Western Economic Journal* 10, 354 – 355.

Tullock, Gordon, 1980, Efficient Rent-Seeking. In J.M. Buchanan, G. Tollison and G. Tullock, *Toward a Theory of the Rent-Seeking Society*, 97-112. College Station: Texas A&M University Press.

Wang, Jia and Betty Coffey, 1992, Board Composition and Corporate Philanthropy, *Journal of Business Ethics*, 11, 771-778.

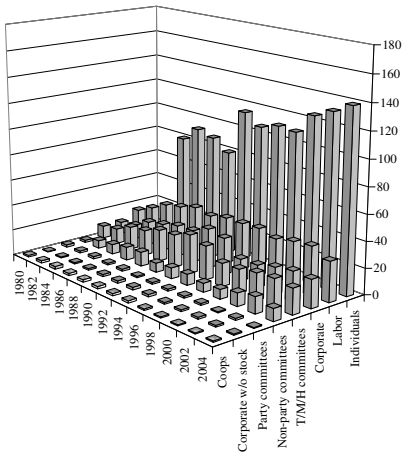
Zardkoohi, Asghar, 1985, On the Political Participation of the Firm in the Electoral Process, *Southern Economic Journal* 51, 804-817.

Figure 1
Sources of Election Funds, 01/1979 – 12/2004

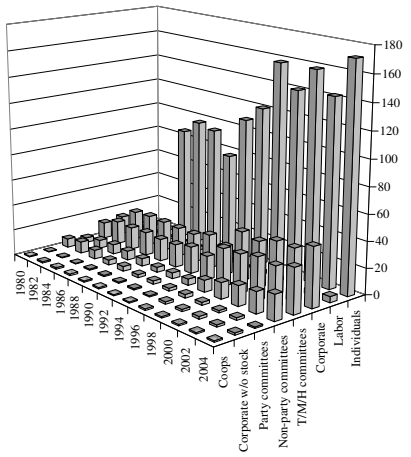
The data is from the Federal Election Commission (FEC) summary files on political contributions to House and Senate elections for the period 1979 – 2004. Panel A presents summary data for the House of Representatives elections. Panel B presents summary data for the Senate elections. Contributions are reported for different classes of contributors. Coops are organizations that define themselves as cooperatives. Corporate w/o stock are corporations without capital stock. Party committees are national party committees. Non-party committees are committees that are not directly affiliated with any parties but that have not reported any connected organization. T/M/H committees are organizations affiliated with trade associations, membership organizations, or organizations in the health field. Corporate are private and public corporations. Labor are organizations connected with labor entities. Individuals are individual contributors. All figures are in millions of 12/2004 dollars.

Panel A: Contributions to House of Representatives candidates, in millions of dollars

Contributions to Democrats

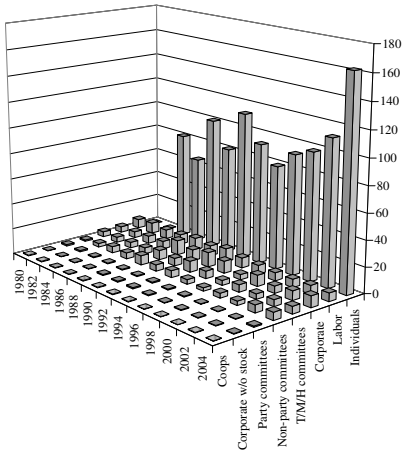


Contributions to Republicans



Panel B: Contributions to Senate candidates, in millions of dollars

Contributions to Democrats



Contributions to Republicans

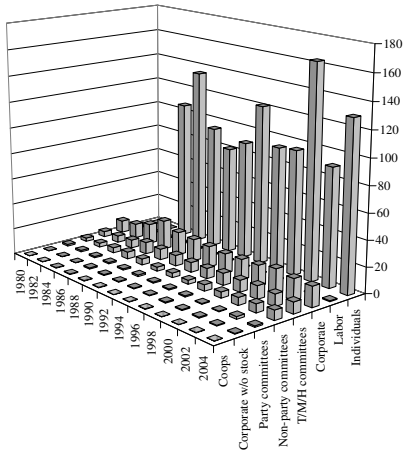


Table I
Firm Contribution Characteristics, 01/1979 – 12/2004

The data is from the FEC detailed files on political contributions to House, Senate and Presidential elections for the period 1979 – 2004. We exclude all non-corporate contributions, contributions from private firms and subsidiaries of foreign firms, as well as contributions from firms for which there is no return data on CRSP. The sample includes 819,815 contributions made by 1,930 unique firms. The table reports firm contribution characteristics per firm, per election cycle. All figures in panel A are in 12/2004 dollars.

Variable	Mean	Min	25th Per	Median	75th Per	Max
Panel A: Dollar amount of firm contributions per election cycle						
Total contributions	$64,694	29	3,606	15,657	60,668	2,713,367
Candidates						
Democrats	30,758	33	2,347	8,352	29,530	1,439,031
Republicans	43,126	29	3,037	11,327	41,431	1,614,756
Races						
House	50,176	41	3,556	14,110	48,920	2,195,978
Senate	26,258	19	2,708	8,854	28,058	658,160
Presidential	5,660	11	1,365	3,661	6,801	84,530
Panel B: Number of firm contributions per election cycle						
Number of contributions	56	1	3	15	57	1,930
Number of candidates	31	1	2	10	38	564
Candidates						
Democrats	16	1	2	6	19	338
Republicans	20	1	2	7	25	245
Races						
House	29	1	3	11	36	505
Senate	8	1	2	4	12	64
Presidential	2	1	1	1	2	9

Table II
Political Indexes Descriptive Statistics, 10/1984 – 10/2004

The data is from the FEC detailed files on political contributions to House, Senate and Presidential elections for the period 1979 – 2004. We exclude all non-corporate contributions, contributions from private firms and subsidiaries of foreign firms, as well as contributions from firms for which there is for which there is no return data on CRSP. The sample includes 819,815 contributions made by 1,930 unique firms. Individual contributions are combined into four different political indexes (PIs) computed as in equations 1 - 4 in the text. Panel A presents the descriptive statistics for each political index. Panel B presents correlation coefficients across four political indexes. $PI_{it}^{candidates}$ is the number of supported candidates, $PI_{it}^{strength}$ is the strength of the relationships between candidates and the contributing firm, $PI_{it}^{ability}$ is the ability of the candidates to help the firm, and PI_{it}^{power} is the power of the candidates. The descriptive statistics and the correlations are computed using full sample pooled data. The *p*-values in Panel B test the null hypothesis that the correlations are equal to zero.

Panel A: Descriptive statistics

Political index	Units	Mean	St Dev	Min	25th Per	Median	75th Per	Maximum
$PI^{candidates}$	candidates	72.5	95.9	1	10	31	98	818
$PI^{strength}$	candidate-months	1,691.0	3,394.4	0	64.6	373.7	1,614.1	49,816.6
$PI^{ability}$	home candidates	6.9	7.3	0	1.5	4.9	9.7	60.2
PI^{power}	candidate-committee rank	256.2	337.4	0	33.1	111.0	351.8	2,619.9

Panel B: Correlations

	$PI^{candidates}$	$PI^{strength}$	$PI^{ability}$	PI^{power}
$PI^{candidates}$	1			
$PI^{strength}$	0.871 (< 0.001)	1		
$PI^{ability}$	0.539 (< 0.001)	0.470 (< 0.001)	1	
PI^{power}	0.968 (< 0.001)	0.890 (< 0.001)	0.544 (< 0.001)	1

Table III
Characteristics of Contributing and Non-Contributing Firms, 01/1984 – 12/2004

The sample of contributing firms is from the FEC detailed files for the period 1979 – 2004. We exclude all non-corporate contributions, contributions from private firms and subsidiaries of foreign firms, as well as contributions from firms for which there is insufficient data on CRSP/Compustat. The final merged sample includes 799,786 contributions made by 1,633 unique firms. Monthly returns from November 1984 to October 2005 are merged with the total number of supported candidates from October of year *t* and accounting variables from June of year *t*. ASSETS is Compustat data item6, total assets, in millions of $, from the fiscal year ending in calendar year *t*-1. Capitalization (SIZE), in millions of $, is calculated using the price and the number of shares outstanding at the end of June of year *t*. EMP is the number of employees in millions (data 29). All accounting variables (book-to-market ratio (BM), Leverage, return on equity (ROE), cash flow (CF), profitability (PROFIT) are calculated using Compustat data in the fiscal year ending in calendar year *t*-1. BHRET36 is the 36-month buy and hold return over July(t-3) to June(t). BHRET12 is the 12-month buy and hold returns over July (t-1) to June (t). The numbers in each cell are time series averages of yearly cross-sectional medians, with the exception of average capitalization (SIZE-AVG), in millions of $, which is the time series average of yearly cross-sectional mean capitalization. Number of firms is the average number of firms per year for the non-contributors and contributors. Number of supported candidates is the average number of supported candidates per firm over a 5 rolling year window (see equation 1 in the text). Panel A reports characteristics of non-contributing and contributing firms. Panel B reports characteristics of the contributing firms based on annual decile sorts of the number of supported candidates (equation 1) measure. Panel C reports characteristics of non-contributing firms (top number) and contributing firms (middle number) as well as the t-test for the difference between non-contributing and contributing firms (bottom number). All numbers, with the exception of ASSETS, SIZE, and SIZE-AVG, are in decimal form, e.g. 0.01 is 1 percent. Details on the construction of these variables are provided in the appendix.

Portfolio	BHRET36	BHRET12	ASSETS	SIZE	SIZE-AVG	BM	LEVERAGE	CF	EMP	PROFIT	ROE	Number of Supported Candidates	Number of Firms
Panel A: Comparison of non-contributing and contributing firms													
Non-contributors	0.366	0.250	243	168	779	0.612	0.141	0.067	1.0	0.132	0.104	N/A	3,467
All contributors	0.265	0.172	3,577	1,633	6,476	0.714	0.248	0.061	10.5	0.128	0.128	40.6	697
t-test (difference)	-4.99	-1.76	10.32	7.54	5.42	2.34	19.32	-3.24	10.66	-0.83	7.65		
Panel B: Comparison of contributing firms partitioned by the number of supported candidates index													
Low Number of Supported Candidates	0.338	0.144	1,030	439	1,344	0.737	0.250	0.062	3.5	0.127	0.122	2.6	70
Decile 2	0.343	0.150	1,501	579	1,687	0.718	0.247	0.063	4.2	0.120	0.123	7.9	70
Decile 3	0.274	0.144	1,744	722	1,495	0.791	0.264	0.059	3.6	0.124	0.125	14.1	69
Decile 4	0.253	0.136	1,847	893	2,034	0.771	0.269	0.055	6.1	0.118	0.124	21.6	70
Decile 5	0.271	0.130	2,271	1,312	2,897	0.725	0.269	0.055	6.6	0.120	0.129	32.9	70
Decile 6	0.271	0.131	2,855	1,653	3,206	0.732	0.254	0.061	11.7	0.129	0.126	50.4	69
Decile 7	0.251	0.131	4,489	2,558	5,378	0.671	0.228	0.066	14.8	0.137	0.129	78.7	69
Decile 8	0.260	0.138	6,748	3,901	7,511	0.677	0.238	0.066	22.5	0.133	0.130	119.8	70
Decile 9	0.244	0.139	12,013	6,339	12,756	0.668	0.250	0.062	30.6	0.132	0.129	185.9	70
High Number of Supported Candidates	0.249	0.142	19,860	13,692	27,264	0.627	0.219	0.065	71.8	0.146	0.148	308.8	70
t-test (high – low)	-3.22	-0.06	7.90	6.45	5.56	-1.94	-3.42	1.03	6.46	3.66	5.81	79.36	

Table III – continued

Portfolio		BHRET36	BHRET12	ASSETS	SIZE	SIZE-AVG	BM	LEVERAGE	CF	EMP	PROFIT	ROE	Number of Supported Candidates	Number of Firms
Panel C: Comparison of non-contributing and contributing firms by size deciles														
Small	Non-cont.	0.247	0.088	79	39	47	0.827	0.131	0.057	0.3	0.102	0.082	N/A	1,281
	Cont.	0.162	0.052	241	57	64	1.192	0.209	0.051	1.0	0.089	0.076	8.4	31
	t-test	(-3.05)	(-0.74)	(4.07)	(1.82)	(1.49)	(4.12)	(7.00)	(-2.43)	(11.00)	(-1.98)	(-1.66)		
Decile 2		0.370	0.109	156	131	142	0.607	0.119	0.063	0.8	0.126	0.098	N/A	636
		0.191	0.059	451	141	148	1.011	0.205	0.047	2.5	0.094	0.083	11.5	41
		(-7.65)	(-1.07)	(5.01)	(0.34)	(0.20)	(7.29)	(6.99)	(-6.88)	(5.72)	(-5.71)	(-3.47)		
Decile 3		0.409	0.141	269	240	254	0.575	0.140	0.068	1.4	0.138	0.107	N/A	427
		0.209	0.109	649	257	268	0.870	0.260	0.059	3.5	0.115	0.104	15.3	49
		(-8.98)	(-0.68)	(4.72)	(0.35)	(0.27)	(6.35)	(11.21)	(-2.95)	(3.42)	(-4.11)	(-0.78)		
Decile 4		0.462	0.153	396	374	392	0.535	0.149	0.074	1.8	0.151	0.117	N/A	313
		0.220	0.116	941	389	403	0.839	0.265	0.055	4.2	0.110	0.110	16.0	61
		(-8.77)	(-0.86)	(5.41)	(0.22)	(0.16)	(6.53)	(13.37)	(-7.66)	(2.07)	(-6.92)	(-1.49)		
Decile 5		0.466	0.172	543	569	597	0.484	0.161	0.077	2.8	0.164	0.125	N/A	239
		0.217	0.115	1,267	603	613	0.786	0.264	0.057	3.9	0.120	0.119	18.1	67
		(-9.24)	(-1.28)	(6.24)	(0.35)	(0.16)	(6.81)	(13.12)	(-6.91)	(2.36)	(-8.88)	(-1.24)		
Decile 6		0.484	0.190	835	851	895	0.485	0.172	0.079	3.8	0.169	0.131	N/A	182
		0.265	0.131	1,889	925	952	0.749	0.270	0.059	5.7	0.124	0.123	23.7	77
		(-6.51)	(-1.37)	(5.27)	(0.53)	(0.39)	(6.46)	(14.12)	(-6.63)	(3.89)	(-8.87)	(-2.05)		
Decile 7		0.520	0.183	1,261	1,324	1,384	0.457	0.171	0.082	4.9	0.177	0.136	N/A	144
		0.266	0.134	2,677	1,401	1,450	0.713	0.267	0.060	8.5	0.130	0.130	31.7	85
		(-8.22)	(-1.18)	(5.00)	(0.38)	(0.30)	(6.63)	(9.64)	(-7.93)	(2.21)	(-9.82)	(-1.36)		
Decile 8		0.517	0.178	1,788	2,185	2,369	0.428	0.165	0.085	7.5	0.182	0.141	N/A	119
		0.262	0.141	4,272	2,347	2,419	0.683	0.262	0.064	11.3	0.131	0.130	54.2	89
		(-7.07)	(-0.86)	(5.83)	(0.47)	(0.14)	(5.99)	(11.97)	(-7.56)	(4.74)	(-11.84)	(-2.72)		
Decile 9		0.523	0.217	3,002	4,160	4,493	0.380	0.150	0.084	11.2	0.188	0.153	N/A	80
		0.297	0.160	7,573	4,638	4,816	0.616	0.252	0.065	22.2	0.136	0.142	89.8	97
		(-6.39)	(-1.21)	(5.04)	(0.64)	(0.40)	(5.13)	(13.67)	(-7.12)	(4.06)	(-9.26)	(-2.30)		
Big		0.507	0.231	8,150	10,705	15,769	0.351	0.160	0.085	33.9	0.192	0.180	N/A	46
		0.353	0.186	17,082	15,924	26,704	0.446	0.184	0.082	54.3	0.178	0.176	183.5	100
		(-2.75)	(-0.89)	(3.86)	(1.84)	(2.24)	(1.89)	(3.48)	(-0.82)	(3.75)	(-2.07)	(-0.22)		

Table IV
Panel Return Regressions for Firms Participating in the Political Process, 11/1984 – 10/2005

The sample of contributing firms is from the FEC detailed files for the period 1979 – 2004. We exclude all non-corporate contributions, contributions from private firms and subsidiaries of foreign firms, as well as contributions from firms for which there is insufficient data on CRSP/Compustat. The sample includes 799,786 contributions made by 1,663 unique firms. Our sample includes 693 firms at the beginning of the sample period and 720 firms at the end of the sample period. These contributions are combined into four separate political indexes (PIs) according to equations 1 – 4 in the text. $PI_{it}^{candidates}$ is the number of supported candidates, $PI_{it}^{strength}$ is the strength of the relationships between candidates and the contributing firm, $PI_{it}^{ability}$ is the ability of the candidates to help the firm, and PI_{it}^{power} is the power of the candidates. Monthly abnormal returns from November 1984 to October 2005 are regressed on the natural logarithm of each lagged political index and the natural logarithm of lagged book-to-market ratio (ln(BM)), the natural logarithm of the lagged firm's market value of equity (ln(SIZE)), and lagged 12-month buy-and-hold returns (BHRET12). Ln(BM) and ln(SIZE) are computed as of June of each year and updated in July. BHRET12 is computed every month over the period *t*-13 to *t*-2. Political indexes are computed as of October of each year and are updated in November. Abnormal returns computed are as the difference between sample firm raw returns and the value-weighted return for the book-to-market, size, and momentum matched portfolio of firms. The t-statistics are clustered by firm and are reported in parentheses.

Specification	Intercept	Ln(BM)	Ln(SIZE)	BHRET12	Ln($PI^{candidates}$)	Ln($PI^{strength}$)	Ln($PI^{ability}$)	Ln (PI^{power})
1	0.0006				0.0004			
	(2.28)				(1.86)			
2	0.0006					0.0005		
	(2.28)					(1.93)		
3	0.0006						0.0008	
	(2.29)						(2.92)	
4	0.0006							0.0004
	(2.28)							(1.89)
5	-0.0002	-0.0007	-0.0010	0.0056	0.0014			
	(-0.76)	(-2.22)	(-4.78)	(7.37)	(4.78)			
6	-0.0003	-0.0006	-0.0009	0.0056		0.0013		
	(-0.81)	(-2.12)	(-4.52)	(7.36)		(4.36)		
7	-0.0002	-0.0003	-0.0007	0.0055			0.0012	
	(-0.74)	(-1.19)	(-4.03)	(7.28)			(4.29)	
8	-0.0002	-0.0006	-0.0010	0.0056				0.0014
	(-0.75)	(-2.14)	(-4.62)	(7.36)				(4.65)

Table V
Panel Return Regressions for Democrat/Republican and House/Senate Political Indexes, 11/1984 – 10/2005

The sample of contributing firms is from the FEC detailed files for the period 1979 – 2004. We exclude all non-corporate contributions, contributions from private firms and subsidiaries of foreign firms, as well as contributions from firms for which there is insufficient data on CRSP/Compustat. The sample includes 799,786 contributions made by 1,663 unique firms. These contributions are combined into four separate Democrat (Republican) political indexes (PIs) by modifying equations 1 – 4 with an indicator variable equal to one if the candidate is affiliated with the Democratic (Republican) Party and zero otherwise. Similarly, contributions are combined into separate House (Senate) PIs by modifying equation 1 – 4 with an indicator variable equal to one if the candidate is affiliated with the House (Senate) and zero otherwise. Monthly abnormal returns from November 1984 to October 2005 are regressed on the natural logarithm of each lagged political index and the natural logarithm of lagged book-to-market ratio (ln(BM)), the natural logarithm of the lagged firm's market value of equity (ln(SIZE)), and lagged 12-month buy-and-hold returns (BHRET12). Panel A1 (A2) reports the results for Republican and residual Democrat (Democrat and residual Republican) PIs. Panel B1 (B2) reports the results for House and residual Senate (Senate and residual House) PIs. The residual PI is obtained from regressing each PI in equation 1 – 4 on its counterpart PI. Only coefficients on PIs are reported. The t-statistics are clustered by firm and are reported in parentheses.

Panel A1: Republican and residual Democrat PI regressions

Specification	Ln(PI^{cand}_{Demres})	Ln(PI^{cand}_{Rep})	Ln($PI^{strength}_{Demres}$)	Ln($PI^{strength}_{Rep}$)	Ln($PI^{ability}_{Demres}$)	Ln($PI^{ability}_{Rep}$)	Ln (PI^{power}_{Demres})	Ln (PI^{power}_{Rep})
1	0.0006	0.0012						
	(2.18)	(4.41)						
2			0.0008	0.0011				
			(3.49)	(3.63)				
3					0.0006	0.0008		
					(2.53)	(2.98)		
4							0.0006	0.0010
							(2.14)	(3.32)

Panel A2: Democrat and residual Republican PI regressions

Specification	Ln(PI^{cand}_{Dem})	Ln(PI^{cand}_{Repres})	Ln($PI^{strength}_{Dem}$)	Ln($PI^{strength}_{Repres}$)	Ln($PI^{ability}_{Dem}$)	Ln($PI^{ability}_{Repres}$)	Ln (PI^{power}_{Dem})	Ln (PI^{power}_{Repres})
1	0.0016	0.0003						
	(5.20)	(1.36)						
2			0.0015	0.0000				
			(5.32)	(0.17)				
3					0.0012	0.0003		
					(4.60)	(1.40)		
4							0.0015	0.0003
							(5.12)	(1.12)

Table V – continued

Panel B1: Senate and residual House PI regressions

Specification	Ln($PI^{cand}_{Houseres}$)	Ln(PI^{cand}_{Senate})	Ln($PI^{strength}_{Houseres}$)	Ln($PI^{strength}_{Senate}$)	Ln($PI^{ability}_{Houseres}$)	Ln($PI^{ability}_{Senate}$)	Ln ($PI^{power}_{Houseres}$)	Ln (PI^{power}_{Senate})
1	0.0008	0.0014						
	(3.02)	(4.59)						
2			0.0008	0.0011				
			(3.33)	(3.68)				
3					0.0011	0.0004		
					(4.25)	(1.80)		
4							0.0008	0.0011
							(3.16)	(3.75)

Panel B2: House and residual Senate PI regressions

Specification	Ln(PI^{cand}_{House})	Ln(PI^{cand}_{Senres})	Ln($PI^{strength}_{House}$)	Ln($PI^{strength}_{Senres}$)	Ln($PI^{ability}_{House}$)	Ln($PI^{ability}_{Senres}$)	Ln (PI^{power}_{House})	Ln (PI^{power}_{Senres})
1	0.0016	-0.0002						
	(5.11)	(-0.85)						
2			0.0015	-0.0001				
			(4.83)	(-0.58)				
3					0.0013	-0.0002		
					(4.67)	(-0.90)		
4							0.0015	-0.0001
							(5.08)	(-0.38)

Table VI
Monthly Abnormal Returns for Firms Participating in the Political Process, 11/1984 – 10/2005

The sample of contributing firms is from the FEC detailed files for the period 1979 – 2004. We exclude all non-corporate contributions, contributions from private firms and subsidiaries of foreign firms, as well as contributions from firms for which there is insufficient data on CRSP/Compustat. sample includes 799,786 contributions made by 1,663 unique firms. These contributions are combined into four separate political indexes (PIs) according to equations 1 – 4 in table II and the text. We form portfolios of contributing firms by weighting each firm by its relative value of a given lagged political contribution index. The portfolios are rebalanced once a year, at the end of October. The weight given to stock *i* in the portfolio from November of year *t* to October of year *t+1* is:

$$w_{it}^{p} = \frac{PI_{it}^{p}}{\sum_{i=1}^{N} PI_{it}^{p}}$$

where p equals the portfolio for a particular political index (equations 1 – 4 in table II and the text), and PI_{it}^{p} is the political index value for firm *i* (where *i*= 1, 2,… N) in October of year *t*. We form a time series of monthly returns to each portfolio from November 1984 to October 2005. We regress the time series of portfolio returns in excess of the risk free rate on the market risk premium, on the three factors from the Fama-French model, and on the four factors from the Fama-French-Carhart model and report the intercept (i.e., the alpha) for each portfolio. Returns are in decimal form, i.e., 0.01 is one percent. T-statistics are in parentheses.

	Portfolio weights			
	$PI^{candidates}$	$PI^{strength}$	$PI^{ability}$	PI^{power}
Returns	weighted	weighted	weighted	weighted
CAPM alpha	0.0040	0.0039	0.0048	0.0040
	(3.35)	(3.15)	(3.74)	(3.35)
FF 3-factor alpha	0.0009	0.0007	0.0011	0.0008
	(1.13)	(0.93)	(1.44)	(1.11)
FFC 4-factor alpha	0.0021	0.0018	0.0022	0.0021
	(2.94)	(2.43)	(3.18)	(2.99)

Table VII
Panel Instrumental Variables Return Regressions for Firms Participating in the Political Process, 11/1984 – 10/2005

The sample of contributing firms is from the FEC detailed files for the period 1979 – 2004. We exclude all non-corporate contributions, contributions from private firms and subsidiaries of foreign firms, as well as contributions from firms for which there is insufficient data on CRSP/Compustat. The sample includes 799,786 contributions made by 1,663 unique firms. These contributions are combined into four separate political indexes (PIs) according to equations 1 – 4 in the text. $PI_{it}^{candidates}$ is the number of supported candidates, $PI_{it}^{strength}$ is the strength of the relationships between candidates and the contributing firm, $PI_{it}^{ability}$ is the ability of the candidates to help the firm, and PI_{it}^{power} is the power of the candidates. The table presents the results for the instrumental variables estimation. In the first stage, each PI is regressed on the number of House Representatives in the firm's state (Panel A), on the natural logarithm of the number of firm employees (Panel B), and the natural logarithm of lagged book-to-market ratio (ln(BM)), the natural logarithm of the lagged firm's market value of equity (ln(SIZE)), and lagged 12-month buy-and-hold returns (BHRET12). We compute the predicted PI from the first stage. In the second stage, monthly abnormal returns from November 1984 to October 2005 are regressed on the natural logarithm of each predicted lagged PI and the natural logarithm of lagged book-to-market ratio (ln(BM)), the natural logarithm of the lagged firm's market value of equity (ln(SIZE)), and lagged 12-month buy-and-hold returns (BHRET12). Ln(BM) and ln(SIZE) are computed as of June of each year and updated in July. BHRET12 is computed every month over the period *t*-13 to *t*-2. Political indexes are computed as of October of each year and are updated in November. Abnormal returns are computed as the difference between sample firm raw returns and the value-weighted return for the book-to-market, size, and momentum matched portfolio of firms. The t-statistics are clustered by firm and are reported in parentheses. The F-statistic in the last column is from the first-stage regression and tests the null hypothesis that the parameter estimate from the univariate regression of PI on the instrument is zero.

Intercept	Ln(BM)	Ln(SIZE)	BHRET12	Pr[Ln($PI^{candidates}$)]	Pr[Ln($PI^{strength}$)]	Pr[Ln($PI^{ability}$)]	Pr[Ln (PI^{power})]	F-statistic from first-stage
Panel A: IV – number of Representatives in the firm's state								
0.0000	-0.0009	-0.0015	0.0053	0.0018				11.44
(0.01)	(-1.76)	(-3.67)	(6.94)	(2.77)				
0.0000	-0.0020	-0.0029	0.0057		0.0040			5.78
(0.06)	(-3.60)	(-5.28)	(7.30)		(4.64)			
-0.0001	-0.0013	-0.0016	0.0053			0.0022		42.02
(-0.34)	(-2.57)	(-5.03)	(7.03)			(4.26)		
0.0002	-0.0015	-0.0028	0.0056				0.0038	14.13
(0.60)	(-3.01)	(-5.26)	(7.26)				(4.64)	
Panel B: IV – Ln(number of employees)								
-0.0001	-0.0009	-0.0014	0.0055	0.0017				414.12
(-0.46)	(-2.86)	(-4.40)	(7.10)	(3.47)				
0.0000	-0.0014	-0.0023	0.0057		0.0031			264.28
(0.10)	(-4.20)	(-5.74)	(7.40)		(5.03)			
0.0001	-0.0004	-0.0013	0.0055			0.0019		48.77
(0.16)	(-1.40)	(-5.05)	(7.19)			(4.16)		
-0.0000	-0.0012	-0.0019	0.0056				0.0026	358.66
(-0.02)	(-3.55)	(-5.10)	(7.26)				(4.43)	