# Individual political contributions and firm performance

Alexei V. Ovtchinnikov<sup>\*</sup> Owen Graduate School of Management Vanderbilt University alexei.ovtchinnikov@owen.vanderbilt.edu

and

Eva Pantaleoni Vanderbilt Kennedy Center Vanderbilt University eva.pantaleoni@vanderbilt.edu

## Abstract

We present evidence that individuals make political contributions strategically by targeting politicians with power to affect their economic well-being. Individuals in Congressional districts with greater industry clustering tend to support politicians with jurisdiction over the industry. The effect is stronger for Congressional committees with jurisdiction over more concentrated industries, in states with more concentrated industries and in states with higher unemployment. Individual political contributions are also associated with improvements in operating performance of firms in industry clusters. The relation between contributions and firm performance is strongest for poorly performing firms, firms closer to financial distress, and for contributions in close elections. The results imply that individual political contributions are valuable to firms, especially during bad economic times.

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<sup>&</sup>lt;sup>\*</sup> Corresponding author. Please send correspondence to the Owen Graduate School of Management, 401 21<sup>st</sup> Avenue, South, Nashville, TN 37203.

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## 1. Introduction

A growing body of research finds that firms establish specific connections with politicians. These connections are often broken into explicit connections that arise when a politician joins the firm or its board of directors (or vice versa) and into implicit connections that arise when a firm makes political contributions to the candidate's (re)election campaign (Masters and Keim (1985), Zardkoohi (1985), Grier, Munger, and Roberts (1994), Kroszner and Stratmann (1998), Kroszner and Stratmann (2005), Faccio (2006), Goldman, Rocholl, and So (2009), and Cooper, Gulen, and Ovtchinnikov (2010)). Researchers also document that political connections are valuable (Fisman (2001), Faccio (2006), Faccio and Parsley (2009), Goldman, Rocholl, and So (2009), Cooper, Gulen, and Ovtchinnikov (2010), for example).<sup>1</sup>

Firms are obviously impacted by government policy, so the desire to establish connections with politicians may seem logical. These firms do not operate in a vacuum, however, so any government decision that significantly impacts them is also likely to impact the surrounding community. If this is true, it is not unreasonable to argue that different firm stakeholders would also have a vested interest in the political process and should try to affect government decisions on behalf of the firm. If successful, these efforts, in turn, should have a positive impact on the firm.

Consider the April 2010 BP oil spill in the Gulf of Mexico, for example. The spill led to a temporary government moratorium on deepwater drilling, which, in turn, has had a significantly negative impact on the surrounding communities that support the oil drilling industry. According to industry experts, every job on an oil rig translates into four or more jobs to service and support it. These include people manufacturing the equipment, delivering it to the platform, and feeding the rig crews (Adams (2010)).<sup>2</sup> Adams (2010), citing data from the Louisiana Mid-Continent Oil and Gas Association, reports further that the moratorium decision erased at least \$165 million in monthly wages from businesses that support the oil drilling industry. In response to the government's decision, close to 11,000 people took it to the streets in protests arguing that the moratorium decision could damage the region even more that the oil spill itself.

This example illustrates that individuals understand their economic dependency on nearby firms and exercise their right to lobby the government. In addition to organized protests, individuals may also exercise the power of their votes (as they did in the November 2010 mid-term election) and the power of their wallet. The latter tactic may be especially effective if the goal is to reach non-local politicians

<sup>&</sup>lt;sup>1</sup> Some papers find that political connections destroy value. See Aggarwal, Meschke, and Wang (2009), for example.

<sup>&</sup>lt;sup>2</sup> Adams, Russell, 2010. "The Gulf Oil Spill: Drill Ban Hits Service Firms." *The Wall Street Journal*, July 22, 2010.

(something that cannot be accomplished with votes) and if the costs of organized protests relative to the expected benefits are high.

The purpose of this paper is to empirically investigate whether individuals do in fact use the power of their wallet and make political contributions strategically with their economic interests in mind. We should certainly expect individuals to pursue a variety of motives when making political contributions, such as ideological, partisan, access-seeking, or identity-based (Francia, Green, Herrnson, Powell, and Wilcox (2003)). We ask whether individuals are also strategic, specifically whether they have their economic livelihood in mind when deciding which politician to support. The answer in the affirmative naturally begs a question of what effect, if any, individual political contribution efforts have on the performance of the nearby firms. The position that we take in this paper, therefore, is that individual political contributions are, at least in part, investment in political capital.

Numerous papers report evidence consistent with the view that contributions represent an investment in political capital. Incumbent politicians who are party leaders, committee chairs, or members of powerful committees raise more money (Grier and Munger (1991), Romer and Snyder (1994), Milyo (1997)). Snyder (1992) shows that political contributions are persistent and argues that it is consistent with the view that contributors establish long-term investment relationships with politicians. Conversely, politicians who change committees or retire experience a drop in the financial support from previous contributors (Romer and Snyder (1994), Kroszner and Stratmann (1998)). A parallel line of research analyzes political contributor characteristics and finds that variables that capture the severity of the free-rider problem faced by the contributor and variables that capture the closeness of the relationship between the contributor and the government help determine the contributor's propensity to participate in the political process (Masters and Keim (1985), Zardkoohi (1985), and Grier, Munger, and Roberts (1994)). Finally, several papers report evidence that politicians trade favors, such as policy decisions, for contributions. Stratmann (2002), for example, finds that politicians are willing to switch their votes based on political contributions received. Consistent with this view, Stratmann (1998) finds that political contributions cluster in time around relevant Congressional votes. The prospect that politicians exchange favors for votes is also present in Prat (2002), Coate (2004), and Ashworth (2006).

Figure 1 hints that individuals are in fact strategic and contribute in times when their economic livelihood is at stake. Panels A and B show total political contributions made by Microsoft and by residents in the Microsoft's Congressional district during the firm's antitrust litigation with the Department of Justice. That Microsoft's political contributions increase significantly during the antitrust litigation is not surprising considering the impact that a negative verdict would have had on the firm. What is perhaps more surprising but consistent with our argument, is the significant increase in contributions from individuals in the Microsoft's district over the same time period. The spikes in

individual contributions around important decision dates are quite evident in panel B. Individuals on average contribute twice as much during each month of the trial period compared to any other period. This translates into \$4.4 million in total individual political contributions during the trial period compared to \$2.8 million during all other months combined. Thus, there is a visibly disproportionate political participation from individuals residing close to Microsoft during the firm's antitrust trial.

Our methodology builds on this example. We use the geographic clustering of industries in the U.S. to identify Congressional districts (CDs) in which individuals are especially economically dependent on the nearby firms. We then identify all Congressional committees in the House of Representatives and the Senate that have jurisdictional authority over the local industry clusters. Politicians serving on these committees are identified as "economically relevant" for individuals residing in the "economically dependent" Congressional districts. Our strategy, therefore, is to match politicians with Congressional districts based on the power of politicians to affect the economic livelihood of individuals in the district.

We first analyze whether individuals in economically dependent CDs have a greater tendency to make political contributions to economically relevant politicians. To pin down the effect, we follow a three-step approach. We first document a significantly higher propensity of economically dependent CDs to make political contributions to economically relevant politicians in the overall sample. We then subject our analysis to a number of robustness tests which, when considered together, allow us to make a stronger statement about the individual propensity to support economically relevant politicians. Third, we perform a number of subsample analyses to further rule out alternative explanations for our baseline results.

In the first step, we estimate a series of CD and politician fixed effects regressions and document a significantly higher propensity of economically dependent CDs to make political contributions to economically relevant politicians. In particular, we estimate logit, poisson, and tobit regressions and find that political contributions are more likely, more frequent, and of higher amount when made from economically dependent CDs to economically relevant politicians. We measure the extent to which a CD is economically dependent with the number of firms under the politician's jurisdiction, the total assets of these firms, and the total employees of these firms and find that all three measures are positively and significantly related to the CD contribution intensity.

A potential concern with our results is that they may simply reflect the local constituency effect. In other words, it may be the case that politicians from economically dependent CDs are picked to serve on economically relevant committees. Local constituents choose to support their own politicians, which gives rise to the positive relation between the CD economic dependence status and its contribution intensity to economically relevant politicians. We explicitly control for whether the economically relevant politician is local to the economically dependent CD and find that it does not affect our results. Non-local economically dependent politicians are just as likely to receive political contributions from economically dependent CDs and receive contributions more often and of higher amounts than other politicians. It is also important to note that the majority of the politician's campaign financing comes from non-local CDs (Gimpel, Lee, and Pearson-Merkowitz (2008). We confirm this result and find that the distance between the politician's own CD and the contributing CD is actually inversely related to the amount of contributions pledged. This also helps alleviate a concern that political contributions are substitutes for votes that economically dependent contributors can pledge to economically relevant politicians.

Our regression methodology focuses on the within-CD and the within-politician variation in the political contribution intensity, so our results are robust to all CD-level and all politician-level confounding covariates. In the second step, we verify that our results are also robust to a variety of alternative specifications that target different time periods and different subsamples of firms, as well as to specifications that control for the local constituency effect and to specifications that control for corporate political contributions. This last control is especially relevant because it implies that are results are not driven by firms simply encouraging their own employees to make political contributions on behalf of the firms. We also note that the majority of CDs in our sample contain no firms that are political active themselves, which suggests that the effect that we identify is largely orthogonal to the corporate political activism identified in previous studies (Cooper, Gulen, and Ovtchinnikov (2010), for example).

We recognize, however, that the set of potential omitted variables is infinite, so our robustness checks that include additional controls can only go so far. Thus, in the third step, we change our strategy and carry out a number of subsample analyses. Specifically, our strategy is to focus on subsamples of CDs and politicians for which the expected likelihood of making and receiving political contributions is stronger under our hypothesis but absent if the results are driven by an omitted variable. We find a higher propensity of economically dependent CDs to make political contributions to politicians who serve on Congressional committees with jurisdictions over more geographically focused industries. We also find a higher contribution propensity in states with more concentrated industries. These results provide further credence to our hypothesis since individuals residing nearby major industry clusters are more economically impacted by local firms and, therefore, should have a greater need to make political contributions to economically dependent CDs to economically relevant politicians. Lastly, we find a higher propensity of economically dependent contributions to economically relevant politicians. We interpret this evidence as also consistent with our hypothesis considering that the individuals' need to lobby government officials should be especially high during bad economic times.

To get a sense for the economic significance of the effect, we sort all CDs in deciles based on the number of firms under the politician's jurisdiction, the total assets of these firms, and the total employees

of these firms and define the most and least economically dependent CDs as those in the top and bottom deciles of each sort, respectively. Depending on the economic dependence measure used, the most economically dependent CDs contribute between \$152.9 million and \$172.3 million to all economically relevant politicians over our sample period. In contrast, the least economically dependent CDs contribute between \$69.9 million and \$84.9 million to those politicians. Thus, compared to the least economically dependent CDs, the most economically dependent CDs contribute twice as much to economically relevant politicians.

Given this evidence, we next proceed to analyzing operating performance of firms located in economically dependent CDs. If individuals derive their economic livelihood from nearby firms and, therefore, make political contributions on behalf of these firms and if politicians do exchange policy favors for contributions, we expect a positive relation between political contributions from economically dependent CDs to economically relevant politicians and firm performance. As in the previous analysis, we proceed in multiple steps. We start by documenting a strong positive relation between political contributions from economically dependent CDs to economically dependent CDs. We then attempt to tackle reverse causality by identifying situations when the relation between political contributions and firm performance should be stronger under our explanation but absent or of the reverse sign under the reverse causality explanation. Finally, we set the bar significantly higher and look for an exogenous shock to the CD economic dependence status. We then analyze how individual political contributions adjust to this shock and what impact, if any, these adjustments have on future firm performance.

In the first step of our analysis, we estimate a series of regressions that relate individual political contributions to future changes in firm operating performance. We obtain operating performance data for all firms located in economically dependent CDs and show that future operating performance changes are positively and significantly related to the frequency and the amount of political contributions made from economically dependent CDs to economically relevant politicians. Interestingly, future performance changes are unrelated to contributions made to politicians who are not economically relevant. We obtain these results in regressions of industry-adjusted ROA changes and market-to-book changes after controlling for other determinants of future performance.

The regression results allow us to comment on correlations but not causality. Reverse causality is a serious issue in our regressions. It well may be the case that political contributions are a form of a normal consumption good, so individuals make more political contributions when firms and nearby residents are doing well. To tackle this issue, we perform two additional tests. First, we carry out a number of subsample analyses. We look for subsamples when the relation between political contributions and firm performance should be stronger under our hypothesis but absent or of the reverse sign under the reverse causality explanation. We find that the positive relation between political contributions to economically relevant politicians and firm performance is stronger for poorly performing firms and firms closer to financial distress. This evidence is consistent with our hypothesis since the incentive to lobby government officials and the expected payoffs from this activity are highest during bad economic times. Note that under the reverse causality, we expect that it is the well-performing firms that exhibit the strongest relation between political contributions and firm performance. Instead, we find the opposite. We also find that the positive relation between political contributions to economically relevant politicians and firm performance is strongest when contributions are made in close (re)election races. We again interpret this evidence as consistent with our hypothesis as the marginal dollar of contributions matters more to a politician in a close race against a strong opponent. Hence, politicians in close races should be more willing to trade favors for contributions. It is difficult to interpret this result under the reverse causality explanation, which would require that individuals residing nearby well-performing firms are for some reason compelled to contribute more to politicians but only in close races.

Our second test focuses on an exogenous shock to the CD economic dependence status and on the impact of this shock on individual political contribution practices and future firm performance. We consider mergers between bidders and targets that operate in different industries and in different locations. Such mergers create a new set of economically relevant politicians for individuals residing in the bidder and the target CD, so it is natural to ask whether individuals alter their contribution practices and increase their support of the newly created economically relevant politicians. We find evidence consistent with this assertion. Even though contributions to all politicians increase from before to after the merger, there is a significantly more pronounced increase in contributions from the bidder CDs to politicians who are economically relevant for the targets and from the target CDs to politicians who are form before to after the merger, while the latter contributions increase by 57 percent. In comparison, contributions from the target CDs to target politicians and from the bidder CDs to bidder politicians increase by 52 percent and 28 percent, respectively.

Finally, we find that contributions from the target CDs to bidder politicians have no impact on bidder operating performance prior to the merger and a significantly positive impact after the merger. Similarly, contributions from the bidder CDs to target politicians have no impact on bidder performance prior to the merger and a positive impact after the merger. These results are consistent with our hypothesis that individuals change their contribution decisions in response to an exogenous shock to their economic dependence status. In turn, these new contributions become relevant for firm performance.

Overall, the results in this paper suggest that individuals make political contributions strategically, with their economic livelihood in mind. These contributions also appear to be valuable to

firms in the sense that they are related to firm performance. The results in this paper are important for several reasons. First, we provide an important contribution to the literature on political connections. We show that not only firms establish political connections to gain access to politicians, but also individuals whose economic livelihood is dependent on politicians make contributions strategically with their economic interests in mind. These contributions are also valuable to firms. One question that we do not comment on in this paper is how precisely political contributions generate value. We rely on previous literature and assume that political contributions matter because politicians care about reelection and need campaign financing to win. Thus, politicians are willing to trade favorable decisions for political contributions. Numerous papers present evidence consistent with this view, but inferences are often difficult because of endogeneity and other methodological concerns (see Ansolabehere, et al (2003) and Stratmann (2005) for excellent reviews). The results in this paper imply that contributors get value from their contributions, which is suggestive of quid pro quo arrangements between contributors and politicians.

Our second contribution is to the literature on geographic location and firm decision making. Numerous papers report evidence that geography matters for firm behavior (Gaspar and Massa (2007), Becker, Cronqvist, and Fahlenbrach (2010), Becker, Ivkovic, and Weisbenner (2010), Francis, Hasan, John, and Waismann (2007), Hilary and Hui (2009), John, Knyazeva, and Knyazeva (2010), to name a few). The results in this paper also demonstrate that geography matters to firms. The channel that we identify here stems from the economic dependency of individuals on nearby firms. Because of this dependency, individuals make political contribution decisions that benefit firms and the contributing individuals. So, unlike prior hypotheses that are mostly built around the view that geographic characteristics influence firm decision making, our hypothesis runs in the opposite direction. It is firm characteristics that affect the surrounding public's decisions. These decisions, in turn, have positive spillover effects on the nearby firms.

The rest of the paper is organized as follows. Section 2 describes our data sources and variable construction. Section 3 presents evidence that individuals strategically choose to contribute money to economically relevant politicians. Section 4 presents evidence that contributions to economically relevant politicians are associated with improvements in future firm performance. Section 5 concludes.

## 2. Data sources and variable construction

### 2.1. Data

Our sample consists of all individual hard money political contributions to candidates for Congress for the period January 1991 – December 2008. We obtain contributions data from the Federal Election Commission (FEC) detailed individual contributions file which contains all individual contributions in excess of \$200. The file includes information on (i) the name and address of the contributing individual, (ii) the identity of the receiving candidate and/or committee, and (iii) the date and the amount of the individual contribution. The original dataset includes 9,314,217 contributions from individuals over our sample period. After deleting individual contributions to non-candidate committees (i.e. contributions to corporate and non-corporate political action committees (PACs) and contributions to national party committees), we are left with 4,874,994 contributions made to 8,302 unique political candidates running for office from all Congressional Districts (CDs). We merge this file with the FEC candidate summary file to obtain information on (i) the candidate's sought after office, (ii) the incumbency status, (iii) the candidate's party affiliation, (iv) the CD that the candidate represents, and (v) the election outcome. For all elected officials, we further obtain data on their committee assignments and their party rankings on each serving committee. This data is from Charles Stewart's Congressional Data Page.<sup>3</sup>

We first assign all individual contributions to their respective CDs using zip code data as follows. The Census Bureau provides cartographic CD boundary files for every election cycle starting with the 103<sup>rd</sup> Congress (January 1993 – January 1995). The size and shape of each CD are established by each state, and are based on the population data provided decennially by the Census Bureau. In our sample, the CDs for the 103<sup>rd</sup> Congress were the first to reflect the redistricting based on the 1990 Census. The CDs for the 108<sup>th</sup> Congress (January 2003 to January 2005) were the first to reflect the redistricting based on the 2000 Census. In addition to decennial redistricting, several other intra-decennial redistricting decisions were made over our sample period, so we obtain CD boundaries data for every election cycle in our sample.<sup>4</sup> The Census Bureau also provides cartographic zip code boundary files, but unlike the CD boundary data, the zip code boundary data is available only for 2000. We assume that zip codes remain fixed for the duration of our sample, an assumption that biases us against finding any results, and use a geographic information system (GIS) to calculate the latitude and longitude of the geographic center of each CD and each zip code in the U.S. Zip codes are assigned to a CD if their geographic center falls with the CD boundary. Further details of this procedure are described in Appendix A.

Figure 2 maps individual contribution totals by CD over our sample period. Two results stand out. First, there appears significant heterogeneity in political contributions across CDs. Contribution totals range from \$905,069 for the 31<sup>st</sup> district in Texas (a strip in central Texas from north Austin to Stephenville) to \$101.5 million for the 14<sup>th</sup> district in New York (Manhattan east side, Roosevelt Island,

<sup>&</sup>lt;sup>3</sup> We thank Charles Stewart III for generously providing this data on his website <u>http://web.mit.edu/17.251/www/data\_page.html</u>.

<sup>&</sup>lt;sup>4</sup> In the 104<sup>th</sup> Congress, six states were redistricted: Georgia, Louisiana, Maine, Minnesota, South Carolina, and Virginia. In the 105<sup>th</sup> Congress, five states were redistricted: Florida, Georgia, Kentucky, Louisiana, and Texas. In the 106<sup>th</sup> Congress, three states were redistricted: New York, North Carolina, and Virginia.

and neighborhoods of Astoria, Long Island City, and Sunnyside in Queens). Second, political contributions cluster in small geographic areas. The ten CDs with the highest contributions are New York's 14<sup>th</sup> district (\$101.5 million), District of Columbia (DC) (\$93.1 million), New York's 8<sup>th</sup> district (\$57.5 million), Virginia's 8<sup>th</sup> district (\$56.8 million), Maryland's 8<sup>th</sup> district (\$49.9 million), Connecticut's 4<sup>th</sup> district (\$41.5 million), California's 29<sup>th</sup> district (\$36.6 million), Illinois's 10<sup>th</sup> district (\$34.9 million), Illinois's 7<sup>th</sup> district (\$32.2 million) and Georgia's 5<sup>th</sup> district (\$30.3 million). Both of the New York's districts are located in New York City, both Illinois's districts are in Chicago, and DC, Virginia's and Maryland's districts are in close proximity to Washington DC. Thus, three small areas of the country that represent less than two percent of all congressional districts and population, account for 11.7% of all individual contributions which amount to almost half a billion dollars (\$425.9 million). Similar evidence of the campaign finance clustering in a small number of wealthy, highly educated CDs is reported in Gimpel, Lee, and Pearson-Merkowitz (2008).

Table 1 provides a complimentary account of CD political contribution patterns. CDs on average contribute \$875,356 per election cycle which is spread across just over 100 candidates. The \$8,417 average contribution per candidate per election cycle represents a significantly higher contribution amount than the amount contributed by corporations (Cooper, Gulen, and Ovtchinnikov (2010)). It is well known that individuals are the largest donor group (Thielmann and Wilhite (1989), Ansolabehere, de Figueiredo, and Snyder (2003) and Cooper, et al (2010)). We similarly find that individuals finance the majority of candidates' campaigns, contributing on average 63.95 percent of total campaign funds. Obviously, individuals have a variety of motivations when making political contributions, including ideological, partisan, access-driven, or identity-based (Francia, Green, Herrnson, Powell and Wilcox (2003), Mansbridge (2003)). In this paper, we investigate whether individuals also pursue strategic economic motives.

The Democrats and the Republicans receive an equal share of individual contributions (just over \$430,000 per CD per election cycle), although the maximum contribution is significantly higher for the Democrats. Individuals also support slightly more Democrats than Republicans. There is little evidence that individuals favor one chamber of Congress over another, as both chambers raise about the same amount from CDs in a typical election cycle. Individuals support twice as many candidates running for the House than for the Senate, but this is to be expected given that all 435 members of the House are reelected in each election compared to only one-third senators reelected in the Senate.

Most of our analysis below focuses on politicians who serve on Congressional committees with jurisdictions over firms in different industries, so it is instructive to examine CD contributions to various committees. Ranked by the average contribution amount, the top ten Congressional committees, all in the Senate, are Appropriations, Small Business, Armed Services, Banking, Housing, and Urban Affairs,

Judiciary, Commerce, Science, and Transportation, Foreign Relations, Budget, Environment and Public Works, and Labor and Human Resources.<sup>5</sup> The average contribution totals range from \$42,474 for the Labor and Human Resources committee to \$63,541 for the Appropriations committee, with CDs supporting on average four to six members of each committee. Committee rankings based on our contribution totals are related to the rankings of powerful committees in Edwards and Stewart (2006). Six out of 10 committees that receive the most money from CDs are also on the Edwards and Stewart (2006) list of powerful committees and the correlation between the two rankings is 0.462. It is also noteworthy that four out of six Senate committees that have clear industry jurisdictions and are defined below are on the list of the top ten recipients of CD contributions.

## 2.2. Hypothesis and variable construction

If individuals pursue economic motives when making political contributions, they should contribute money to politicians who are in a position to affect their economic well-being. Prior research finds that politicians who are most capable of influencing policy outcomes, such as senior members of Congress, majority party leaders, and ranking members of important committees, receive more political contributions (Jacobson (1980), Grier and Munger (1991), Romer and Snyder (1994), Ansolabehere and Snyder (1999)). We build on this reasoning further. Our analysis derives from the geographic clustering of different industries (Glenn and Glaeser (1997), Porter (2000), Enright (2003)), which themselves fall into jurisdictions of different Congressional committees. Examples of industry clusters include the insurance industry in Connecticut, the high tech industry in the Silicon Valley, the oil industry in Texas and Oklahoma, the coal industry in West Virginia, and the auto manufacturing industry in Michigan. We assert that individuals residing in such locations are economically affected by Congressional committees that oversee these industry clusters. Therefore, we hypothesize that these individuals are more likely to contribute to members of Congressional committees with jurisdiction over local industries. Thus, our testing strategy involves the identification of "economically dependent" CDs and matching them with "economically relevant" politicians.

We first identify Congressional committees with clear industry jurisdictions. These committees are the Agriculture, Nutrition, and Forestry (Senate (S)), Agriculture (House (H)), Armed Services (S), Armed Services / National Security (H), Banking, Housing, and Urban Affairs (S), Financial Services (H), Commerce, Science, and Transportation (S), Energy and Commerce (H), Energy and Natural Resources (S), Resources / Natural Resources (H), Environment and Public Works (S), Merchant Marine and Fisheries (H), and Transportation and Infrastructure (H). Table B.1 in Appendix B summarizes

<sup>&</sup>lt;sup>5</sup> The Labor and Human Resources committee is renamed into Health, Education, Labor, and Pensions committee starting in the 107<sup>th</sup> Congress.

industry jurisdictions of each committee in our study. Industry jurisdictions are from committee websites and are supplemented with data on committee jurisdictions from the Center for Responsive Politics. We also obtain the firm headquarters location data from Compustat and match the zip code of firms' headquarters to CDs using the methodology above.<sup>6</sup> Armed with the Congressional jurisdiction data and the headquarters data, we compute four different measures of the CD economic dependence. First, we define CD *i* as economically dependent on politician *j* if the CD contains at least one firm that operates in an industry that falls under the jurisdiction of the committee that politician *j* sits on:

$$EDD_{ijt} = \begin{cases} 1, \text{ if } CD_i \text{ contains at least one firm in jurisdiction of politician}_j \\ 0, \text{ otherwise} \end{cases}$$
(1)

To build on the concept of the geographic industry clustering further, we calculate three other measures of the CD economic dependence. We calculate the total number of firms that are located in a given CD and that operate in the jurisdiction of a given politician's Congressional committee:

$$EDD_{ijt}^{Firms} = \sum_{n=1}^{N} I_{nt}$$
<sup>(2)</sup>

where  $I_{nt}$  is an indicator variable set to one if firm *n* is headquartered in CD *i* and operates in the jurisdiction of politician *j* and zero otherwise. We also calculate the total assets and the total employees of the above firms:

$$EDD_{ijt}^{Assets} = \sum_{n=1}^{N} I_{nt} \times Assets_{nt}$$
(3)

$$EDD_{ijt}^{Employees} = \sum_{n=1}^{N} I_{nt} \times Employees_{nt}$$
(4)

where *Assets* and *Employees* are the firm total assets [at] and the total employees [emp] from Compustat and the rest of the variables are as defined above.

A couple of examples may help fix ideas. New York's 8<sup>th</sup> Congressional district is home to the headquarters of 10 insurance companies in 2008. The combined assets of these companies amount to

<sup>&</sup>lt;sup>6</sup> The methodology of identifying a firm location by the location of its headquarters is standard in the literature. One limitation with our data is that we only know the current location of firms in our sample. Firms very infrequently relocate their headquarters (Pirinsky and Wang (2006)), however, so any resulting measurement error is likely to be quite small. Moreover, unless it is systematically related to our dependent variables, the measurement error that does exist actually biases us against finding any results. Hilary and Hui (2009) similarly use Compustat data to identify firm locations.

\$106 billion. The companies employ 75,000 employees. We define New York's 8<sup>th</sup> district as economically dependent on politicians who serve on the House Financial Services and the Senate Banking, Housing, and Urban Affairs committees (table B.1).<sup>7</sup> As reported above, the district contributed \$57.7 million to politicians over our sample period. Members of the House Financial Services and of the Senate Banking, Housing, and Urban Affairs committees received \$2.8 million (4.9%) and \$6.9 million (12.1%) of that money, respectively. Similarly, 41 oil companies are headquartered in Texas' 7<sup>th</sup> district, with combined assets and employees of \$327 billion and 240,000, respectively. We define Texas' 7<sup>th</sup> district as economically dependent on politicians who serve on the House Energy and Commerce, and Natural Resources committees as well as the Senate Commerce, Science, and Transportation, Energy and Natural Resources, and Environment and Public Works committees. The district contributed \$28.2 million over our sample period, of which \$5.11 million (18.12%) went to members of the above committees.

Table 2 describes our CD economic dependence variables in detail. In panel A, an average CD contributes to a quarter of politicians who are economically relevant. That percentage varies considerably from 0 to 81%. From the politician's perspective, 18.6% of all CDs that contribute money to his / her campaign are economically dependent. Conditional on receiving money from an economically dependent CD, there are approximately four firms in the CD which operate under the jurisdiction of a politician. This number varies considerably from one firm to 56 firms. A typical firm has total assets of \$3 billion (the median is \$985 million) and employs four thousand employees (the median is 1,256 employees). Compared to a median-sized firm on Compustat (\$173 million in median assets and 494 employees), our firms are significantly larger. However, these firms are much smaller than firms with organized PACs studied in Cooper, et al (2010). This is consistent with Masters and Keim (1985) who argue that the probability of establishing a PAC is positively related to firm size.

Panel B hints at the results in the next section. Despite the fact that only 18.6% of all CDs that contribute to politicians are economically dependent, a typical politician raises substantially more funds and is approached more frequently by economically dependent CDs. In panel B, politicians receive 196 contributions totaling \$157,787 from economically dependent CDs in a given year compared with 167 contributions totaling \$125,136 from other districts. The differences are statistically significant (the t-statistics for the differences are 2.28 and 3.81, respectively). This is not just an outlier effect, as the rest of the panel indicates that the entire distribution for the economically dependent CDs lies well to the right of the distribution for the other CDs. When contributions from economically dependent and non-

 $<sup>^{7}</sup>$  There are obviously other firms located in the 8<sup>th</sup> district, which may fall in jurisdiction of other politicians. Thus, the 8<sup>th</sup> district may be dependent on other politicians who serve on other committees as well. Those links are identified in the same manner.

dependent CDs are added up, those politicians who do receive contributions from economically dependent districts, receive on average 41.1% of all their individual contributions and 16.9% of all contributions (including contributions from PACs and national party committees) from economically dependent districts. Thus, as a group, economically dependent CDs finance a significant percentage of politicians' (re)election campaigns.

Figure 3 illustrates the clustering of contributions from economically dependent CDs further. We plot the amount of CD contributions received by members of the House and Senate Armed Services and Agriculture committees (panels A and B, respectively). In each map, we also plot the locations of the 25 largest government contractors in each committee jurisdiction. The results, at least to us, are quite salient. First, contribution patterns clearly differ between the two panels. This suggests that we are not just measuring the overall CD propensity to contribute. Instead, CDs differ in their contribution intensities depending on which politicians we focus on. Second, the clustering of contributions in CDs around the locations of the relevant firms is clearly evident. Specifically, CDs with economically dependent firms outcontribute other CDs by a factor of three to one in panel A and by a factor of two to one in panel B.

## 3. Contributions from economically dependent Congressional districts

In this section, we formally analyze the tendency of individuals residing in economically dependent CDs to make political contributions to economically relevant politicians. We proceed in three steps. First, we identify a significantly higher propensity of individuals to make political contributions to economically relevant politicians in the overall sample. We document this result using the within-CD and the within-politician variation in the political contribution intensity, so the effect that we identify is robust to all CD-level and all politician-level confounding covariates. Second, we subject our analysis to a number of robustness tests which, when put together, allow us to make a stronger statement about the propensity of economically dependent CDs to contribute to economically relevant politicians. Third, we perform a number of subsample analyses to further rule out alternative explanations for our baseline results.

## 3.1. Main results

For every year of data, we estimate the following regression:

$$C_{ijt} = a_i + a_j + C_{ijt-1} + EDD_{ijt} + \varepsilon_{ijt}$$
(5)

where  $C_{ijt}$  is a political contribution made from CD *i* to politician *j* at time *t*,  $a_i$ ,  $a_j$ , are CD- and politicianspecific fixed effects, and  $EDD_{ijt}$  is an indicator variable set to one if a contribution is made from an economically dependent district.  $C_{ijt-1}$  captures possible persistence in CD giving. Linear fixed effects,  $a_i$  and  $a_j$ , capture all sources of unobserved heterogeneity in contribution practices across CDs and across politicians, respectively. Examples of these effects include the location of a CD and its proximity to Washington DC, and the politician's party affiliation and the incumbency status, respectively. Thus, by exploiting the within-CD and the within-politician variation in contribution practices in equation 5, we control for all potential confounding covariates at the CD and the politician level.

Following Fama and MacBeth (1973), we average coefficients across years and compute standard errors from the time-series variation in parameter estimates.<sup>8</sup> This approach, also used in Fama and French (2001) and Fama and French (2002), allows for correlation of residuals across CDs and politicians. We use four measures of CD economic dependence defined in equations 1 - 4 above and estimate three separate models of CD contributions: (i) a logit model relating the contribution probability to the CD economic dependence status, (ii) a poisson model relating the contribution frequency to the CD economic dependence status, and (iii) a left-censored tobit model relating the contribution total amount (censored at 0) to the CD economic dependence status. The results of estimating all 12 models are reported in panel A of table 3.

The results are consistent with our hypothesis. Contributions are more likely, more frequent, and of higher amount when a CD is economically dependent on a politician. In the first row, the coefficient on the *EDD* indicator is positive and at least marginally significant in all three models. This implies that CDs that contain one or more firms in the politician's Congressional committee jurisdiction are more likely to make political contributions to that politician. These economically dependent CDs also contribute more frequently and contribute higher amounts.

The remaining three rows present the results for the other measures of the CD economic dependence status. The coefficients on  $EDD^{Firms}$ ,  $EDD^{Assets}$ , and  $EDD^{Employees}$  are positive in all three models and significant at the 1 percent level in all but one specification. Compared to a simple indicator, all three variables are more precise measures of the geographic clustering of industries, so the results in the bottom three rows of panel A provide stronger evidence that CDs with greater industry clustering and, therefore, with greater economic dependence have an increased tendency to target economically relevant politicians.

<sup>&</sup>lt;sup>8</sup> We use the Fama-MacBeth approach in this section because it is computationally feasible. The alternative approach using pooled data would involve estimating the following model:

 $C_{ijt} = a_t + a_i + a_j + (a_t \times a_i) + (a_t \times a_j) + C_{ijt-1} + EDD_{ijt} + \varepsilon_{ijt}$  (6) where  $a_t$  are year fixed effects and the rest of the variables are as defined above. In this model, the interactions of fixed effects,  $(a_t \times a_i)$  and  $(a_t \times a_j)$  capture unobserved heterogeneity in contributions across CDs and time (such as the CD wealth and income, population, and education level) and across politicians and time (such as the politician's age and tenure in Congress), respectively. Unfortunately, the estimation of such a model is computationally prohibitive since it requires identification of 19 year fixed effects, 466 CD fixed effects, 7,781 politician fixed effects, 8,388 CD-year interactions, and 24,375 politician-year interactions.

To gauge the economic significance of the relation between the CD economic dependence status and its tendency to contribute to economically relevant politicians, we perform the following simple calculation. We sort all CDs into deciles based on the values of their economic dependence variables and calculate the total amount of political contributions to economically dependent politicians for each decile. The results are economically significant. Specifically, CDs in the bottom *EDD*<sup>*Firms*</sup> decile contribute a total of \$84.9 million to economically relevant politicians over our sample period. In contrast, CDs in the top *EDD*<sup>*Firms*</sup> decile contribute a total of \$172.3 million to economically relevant politicians. This represents a 103 percent increase in the political contribution total as we move from the least economically dependent CDs (with an average of 2.7 economically dependent firms) to the most economically dependent CDs (with an average of 23.1 economically dependent firms). Similarly, when CDs are sorted into the *EDD*<sup>*Assets*</sup> and *EDD*<sup>*Employees*</sup> deciles, the total amount of political contributions to economically relevant politicians increases from \$69.9 million and \$78.0 million for CDs in the bottom respective deciles to \$168.2 million and \$152.9 million for CDs in the political contribution total as we move from the least represents, respectively, a 141 percent and a 96 percent increase in the political contribution total as we move from the least economically dependent CDs.

In panel A of table 3, we treat all CD political contributions equally. It is plausible, however, that individuals making contributions may rationally discriminate between local and non-local politicians, especially if local politicians are also economically relevant. On one hand, it is possible that individual contributors are less likely to contribute money to a local politician because they can instead pledge voter support (Bombardini and Trebbi (2008)). On the other hand, if political contributions represent an investment in political capital and individuals rationally maximize the expected return on their investment, they may be more likely to contribute to a local politician because of their own voting expectation (Stratmann (1992)). To capture the incremental effect of the politician locality, we extend equation 5 and include an indicator variable for contributions received from the politician's own Congressional district as well as the interaction between the locality indicator and the CD economic dependence variables above:

$$C_{ijt} = a_i + a_j + C_{ijt-1} + OD_{ijt} + EDD_{ijt} + OD_{ijt} \times EDD_{ijt} + \varepsilon_{ijt}$$
(7)

where  $OD_{ijt}$  is an indicator variable set to one if a contribution is made from the politician's own district and the rest of the variables are as defined above. The results are presented in panel B of table 3.

Two results are evident. First, the coefficients on all economic dependence variables themselves, which in this specification measure the tendency of individual contributors to support non-local economically relevant politicians are positive and, except for the *EDD* indicator, statistically significant. Thus, the economic dependence effect that we are finding is not merely a local constituency effect. In other words, it is not the case that politicians who we think are economically relevant are simply local

politicians who raise more money from their own districts. Second, there appears no robust evidence on whether local economically relevant politicians are any more likely to be targeted by their own constituents compared to other contributors. In the logit and tobit models, the coefficients on interactions of the locality indicator with the economic dependence variables are positive and mostly significant, but in the poisson models the coefficients on the interactions are negative and usually significant. Therefore, we do not draw any conclusions with respect to whether individuals discriminate between local and non-local economically relevant politicians in their contribution decisions.

### 3.2. Robustness

We perform a number of robustness tests. First, we confirm that our results are not driven by select years in our sample, such as election years. We aggregate contributions from each CD to each politician across years and regress these contribution totals on our economic dependence measures. To be specific, instead of estimating 18 annual cross-sectional regressions and drawing inferences from the time-series distribution of parameter estimates, we now estimate a single cross-sectional regression for each model and each economic dependence variable above. The results are similar to those reported in table 3. Aggregated across all 18 years, contributions are more likely, more frequent, and of higher total amount when a CD is economically dependent on a politician.

Second, we repeat our analysis on a subsample of geographically focused firms. Such firms should be more dependent on local politicians because they are constrained from shifting operations away from adversely affected areas. Ideally, this subsample would include only firms with operations exclusively in a given CD. Unfortunately, the Compustat Segment file provides geographic information only at the country level. So, we exclude from our definitions of economic dependence multinational firms asserting that such firms are better able to move production and investment from the control of local politicians. Such firms also have better access to international capital markets. As expected, the main results reported in table 3 are stronger on this subsample. In the tobit regressions, for example, the coefficients on the  $EDD^{Firms}$ ,  $EDD^{Assets}$ , and  $EDD^{Employees}$  are 366.84 (standard error (SE) = 105.40), 16.38 (SE = 9.03), and 53.04 (SE = 19.68), respectively. The logit and poisson regression results are similar.

Third, we repeat our analysis on the post-1994 subsample. Edwards and Stewart (2006) argue that the role of Congressional committees and committee chairmen has changed since the 1994 Republican takeover of Congress. After 1994, Congressional committees lose some of their influence, the resources available to committees are reduced, party leaders, but not the committee chairmen, have more influence on committees' agenda, and committee chairmen are no longer picked on seniority but merit, which itself is weighted heavily by how effective politicians are in pursuing party policy and how effective politicians are in helping the party reach its electoral goals. It is possible, therefore, that our

results are weaker in the post-1994 period. We find that this is not the case. The coefficients in all three models barely budge and are just as significant in the post-1994 period as over the entire sample period.

Fourth, we consider further the possibility that our results reflect the local constituency effect. Panel B of table 3 indicates that our results are not driven by local politicians serving on committees with jurisdiction over firms in their own districts. It could still be the case, however, that the economically dependent CDs that we study are CDs adjacent to the politician's own CD, so our results capture the local constituency effect as opposed to the economic dependence effect. So, we calculate the distance from every contributing CD to the politician's own CD and include it as a control variable in our regressions.<sup>9</sup> The distance between the CD and the politician does not explain our results. For example, controlling for the distance, the coefficients on  $EDD^{Firms}$ ,  $EDD^{Assets}$ , and  $EDD^{Employees}$  in the tobit models are 103.53 (SE = 17.63), 11.11 (SE = 2.67), and 6.79 (SE = 1.46), respectively. The results in other models are similar. Interestingly, the distance coefficient has a negative sign and is highly significant, indicating that nearby CDs are less likely to contribute to politicians. Gimpel, Lee, and Pearson-Merkowitz (2008) similarly report that adjacent districts are less likely to support a politician compared to more distant districts.

Lastly, we consider the possibility that individual contributions that we analyze in this study are nothing more but a reflection of the *firm* contribution intensity. Cooper, et al (2010) find that a non-trivial portion of U.S. firms make political contributions. Moreover, firms appear to benefit from them. Thus, it is possible that local residents are directly influenced by firms into making political contributions. While still informative, the implications of this finding are different from our argument here. We collect data on firm-level political contributions following the methodology described in Cooper, et al (2010), and include firm contributions as a control variable. The firm-level contribution variables always enter with a positive sign and are significant. More importantly, the inclusion of the control variables does not drive out our results. For example, the coefficients on  $EDD^{Firms}$ ,  $EDD^{Assets}$ , and  $EDD^{Employees}$  in the tobit regressions are 69.08 (SE = 19.97), 5.58 (SE = 2.76), and 3.24 (SE = 1.71), respectively, even after controlling for firm contributions. The results in other models are similar. Thus, there is an independent individual contributions effect present in our sample.

Our methodology to this point is robust to all CD-level and all politician-level fixed effects. However, any CD-politician interaction effect unrelated to our economic dependence variables is not captured in the main model. If such an interaction is correlated with our measures of economic dependence, the results in this section are spurious. Consider, for example, a possible identity-based interaction between politicians and the contributing individuals. Women may be more likely to support female politicians. African-Americans may be more likely to support African-American politicians. It is

<sup>&</sup>lt;sup>9</sup> If a politician is a senator, we calculate the distance from the center of the contributing CD to the center of the politician's state.

possible that these interactions are systematically correlated with our measures of economic dependence, in which case the conclusions in this section are false. Below we address this issue in greater detail.

#### 3.3. Subsample analysis

Our strategy is to focus on specific subsamples of CDs and politicians for which the expected likelihood of making and receiving political contributions is stronger under our hypothesis but absent under alternative explanations. We begin by analyzing political contributions separately for each Congressional committee in our sample. Because there is only limited within-CD and within-politician annual variation in our covariates at the Congressional committee level, we pool all observations across years and estimate a version of equation 5 on the pooled data that also includes a year fixed effect. Standard errors are computed in a usual way and are adjusted for the clustering at the CD level and across years. In the interest of space, we report the results for regressions with *EDD*<sup>Firms</sup> as a measure of the CD economic dependence. We obtain similar results in other specifications.

First, our main results are robust across most Congressional committees. The coefficients on *EDD*<sup>*Firms*</sup> in all three models are positive and mostly significant. The statistically weakest results are for the Agriculture committee, although the coefficients are always positive. One way to judge the overall significance of the results is to calculate the probability that all six coefficients in each model are positive by chance. If coefficients are drawn from a binomial distribution with a 0.5 probability of a positive outcome, the null hypothesis that the sign of coefficients is random is rejected with a p-value of 0.0156.

To address the concern that our results may be spurious, we argue that the results should be stronger for committees with a greater geographic clustering of the affected industries. When individuals reside nearby major industry clusters (Silicon Valley, for example), they are more economically impacted by local firms and, therefore, by politicians with Congressional jurisdiction over these firms. So, for each Congressional committee, we compute the Herfindahl index of the geographic sales concentration and correlate it with the statistical significance of the coefficients in table 4. The index values range from 0.030 for the Commerce committee to 0.187 for the Armed Services committee. The correlations between the t-statistics on the regression coefficients and the Herfindahl index are 0.377, 0.429, and 0.181 for the logit, poisson, and tobit regressions, respectively. These results are consistent with our argument.

Our second test is to analyze individual political contribution decisions by state. To get directly at the statistical significance of the results, figure 4 reports t-statistics from state-by-state tobit regressions of the amount of political contributions on *EDD*<sup>*Firms*</sup>. The results for other specifications are similar. As in the previous test, the results are robust across states and more significant for states with a greater geographic clustering of industries. Specifically, the regression coefficients for 38 out of 42 possible state regressions are positive, so the null hypothesis that the sign of the coefficients is randomly distributed

across states is rejected (p-value < 0.001). Moreover, the correlation between the state regression tstatistics and the state Herfindahl index is 0.221. As yet another measure of the geographic clustering of industries, we also plot in Figure 4 the number of Fortune 500 firms in each state. Individuals residing nearby very large firms are more economically impacted by these firms and, therefore, should have a stronger incentive to make political contributions to economically relevant politicians. Consistent with this hypothesis, the correlation between the state regression t-statistics on the  $EDD^{Firms}$  coefficient and the number of Fortune 500 firms in each state is 0.684.

Our final test is to analyze political contribution decisions separately for states with low and high unemployment. Prior research posits that contributors are motivated to participate in the political process because of the government's ability to improve adverse market conditions (Grier, Munger, and Roberts (1994), for example). Based on this logic, individuals should be particularly drawn to making political contributions when the risk of adverse conditions is high, such as during periods of high unemployment. So, we analyze whether the contribution intensity is stronger in states with high unemployment. We obtain state unemployment data from the U.S. Bureau of Labor Statistics and define states with low (high) unemployment as states with below (above) the national unemployment level in a given year. Table 5 panel A presents the results for the low unemployment states; panel B presents the results for the high unemployment states.

The poisson and tobit regression results are consistent with our hypothesis. The coefficients in both models are more significant in states with high unemployment. Specifically, for low unemployment states in panel A, the only coefficient that is significant in both models is the *EDD*<sup>*Firms*</sup> coefficient. In contrast, for high unemployment states in panel B, most coefficients are highly significant. Only the coefficients on the *EDD* indicator in the tobit model and on *EDD*<sup>*Employees*</sup> in the poisson model are insignificant at conventional levels in panel B. The logit results are inconsistent with our hypothesis, however. We obtain generally stronger results in low unemployment states in panel A. We dig further and find that this result is reversed during economic recessions. Because the need to seek political support is high in states with high unemployment and is even higher during recessions, this result appears consistent with our hypothesis.

Overall, the above results are consistent with our hypothesis that economically dependent CDs have a greater tendency to support economically relevant politicians. It is harder to explain the results under the alternative view that the positive association between political contributions and the CD economic dependence status is driven by an omitted variable. First, it would have to be the case that our economic dependence variables are systematically correlated with the omitted variable. We cannot rule out this possibility, but what is less likely, is that the strength of such a link would vary systematically in the subsamples analyzed in this section. For example, to explain our results, it would have to be the case

that the link between the omitted variable and the political contribution intensity is stronger in states with more concentrated industries and a greater number of large firms (such as Texas and California, for example). It would also have to be the case that the link is stronger for politicians who serve on committees with jurisdictions over more geographically focused industries. So, in totality, the bar for rejecting our hypothesis is set quite high. We, therefore, lean in favor of our explanation of the results.

## 4. Individual political contributions and firm performance

We now proceed to analyzing operating performance of firms located in economically dependent CDs. If individual political contributions, at least in part, represent a positive NPV investment in political capital, we expect a positive relation between political contributions from economically dependent CDs and future firm performance. As in the previous section, we proceed in three steps. First, we identify a strong positive association between political contributions from economically dependent CDs and changes in future firm performance in the overall sample. Second, we attempt to tackle reverse causality by identifying situations when the relation between political contributions and firm performance should be stronger under our hypothesis but absent or of the reverse sign under the reverse causality explanation. Third, we set the bar significantly higher and analyze how individual political contributions adjust to exogenous changes in the CD economic dependence status and what impact these adjustments have on future firm performance.

### 4.1. Main results

We estimate two regressions that relate individual political contributions to future firm performance:

$$\Delta IAROA_{it} = Ln(Q_{it-1}) + Ln(Size_{it-1}) + \Delta IAROA_{it-1} + Ln(C_{it-1}) + Ln(EDDC_{it-1}) + \varepsilon_{it}$$
(8)

$$\Delta IAQ_{it} = CAPEX_{it-1} + R\&D_{it-1} + Ln(Size_{it-1}) + ROA_{it-1} + Ln(C_{it-1}) + Ln(EDDC_{it-1}) + v_{it}$$
(9)

where  $\Delta IAROA_{it}$  is the industry-adjusted ROA change for firm *i* at time *t* defined as  $(ROA_{it} - ROA_{it-1}) - (IROA_{it} - IROA_{it-1})$ , *IROA<sub>it</sub>* is the industry median ROA ratio,  $Q_{it-1}$  is the firm's market-to-book ratio,  $Size_{it-1}$  is the firm's market value of equity,  $\Delta IAQ_{it}$  is the industry-adjusted change in market-to-book defined as  $(Q_{it} - Q_{it-1}) - (IQ_{it} - IQ_{it-1})$ ,  $IQ_{it}$  is the industry median market-to-book ratio,  $CAPEX_{it-1}$  is the firm's level of capital expenditures, and  $R\&D_{it-1}$  is the firm's level of R\&D expenditures. ROA is measured as income before extraordinary items [ib] over lagged assets [at]. Q is measured as market equity (shares outstanding [csho] times the stock price [prcc\_f]) plus total debt [dltt + dlc] plus preferred stock liquidating value [pstk1] minus deferred taxes and investment tax credit [txditc] all over assets. Capital expenditures and R&D expenditures are measured as capital expenditures [capex] over lagged assets, respectively. All control

variables are from prior literature (McConnell and Servaes (1990), Ferris, Jagannathan, and Pritchard (2003), Cooper, et al (2010), Coles, Lemmon, and Meschke (2010), among others). The error terms in equations 8 and 9,  $\varepsilon_{it}$  and  $v_{it}$ , are assumed to be possibly heteroskedastic and correlated within firms and across years (Petersen (2009)). All variables are Winsorized at the upper and lower one-percentiles.

Equations 8 and 9 include two sets of measures of individual political contributions.  $EDDC_{it-1}$  measures the frequency and the amount of individual contributions made to politicians who are economically relevant, i.e. politicians who serve on Congressional committees with jurisdiction over the firm *i*'s industry.  $C_{it-1}$  measures the frequency and the amount of individual contributions made to all other politicians. When both of these variables are included in the regression, the former variable picks up the cross-sectional variation in contribution intensity related to the politician's economic relevancy status. The latter variable controls for any remaining cross-sectional variation in contribution and other motives. To facilitate comparison, all political contribution and other independent variables are standardized to have unit variance.

Table 6 presents the results. In total, we estimate four separate models. In panel A columns 2 - 7, we relate the frequency of individual political contributions to the industry-adjusted ROA changes; in columns 8 - 13, we replace the frequency with the amount of contributions and relate it to the industry-adjusted ROA changes. In panel B, we relate the frequency (columns 2 - 7) and the amount (columns 8 - 13) of individual political contributions to the industry-adjusted market-to-book changes.

In columns 2 and 3 and columns 8 and 9, respectively, we consider the frequency and the amount of contributions made only to non-economically relevant politicians. There appears little relation between these contributions and changes in future operating performance. The coefficient on  $Ln(C_{it-1})$  is insignificant in three out of four specifications and is actually negative in column 2 panel B. It is only marginally significant in column 8 panel A. These results present the first challenge to the reverse causality explanation. If it were the case that persistent good firm performance induced local residents to contribute more to politicians, we would expect a positive relation between all contributions, including those made to non-economically relevant politicians, and firm performance. Instead, the coefficient on  $Ln(C_{it-1})$  is indistinguishable from zero.

We do find a strong positive relation between contributions to economically relevant politicians and firm performance. In columns 4 and 5 and columns 10 and 11 in both panels, the coefficient on  $Ln(EDDC_{it-1})$  is always positive and significant at the 1 percent level. In terms of economic significance, the effect of political contributions on performance is of the same order of magnitude as that of market-tobook and firm size in ROA regressions and of capital expenditures and R&D expenditures in market-tobook regressions. When compared to the average industry-adjusted ROA and market-to-book change of - 0.07% and -0.134, respectively, the effect of political contributions on firm performance is economically significant.

Finally, in columns 6 and 7 and columns 12 and 13, we consider all individual contributions together. The relation between political contributions to economically relevant politicians and firm performance remains positive and significant. The coefficient on  $Ln(EDDC_{it-1})$  is significant at the 1 percent level in all specifications. The economic significance falls slightly in the ROA regressions but increases in market-to-book regressions. There remains no relation between political contributions to non-economically relevant politicians and firm performance. The coefficient on  $Ln(C_{it-1})$  actually becomes less significant with the inclusion of contributions to economically relevant politicians.

The results in table 6 are robust to a variety of alternative specifications. First, we obtain similar results in Fama-MacBeth (1973) regressions. Second, the results are robust to our definition of future performance changes. We replace industry-adjusted ROA and market-to-book changes in table 6 with raw changes in these variables and find a consistently strong positive relation between political contributions to economically relevant politicians and future ROA and market-to-book changes. Third, the results are robust to our specification of control variables. We replace the levels of all control variables with their changes (i.e. changes from t-2 to t-1) and again find a consistently positive relation between political contributions to economically relevant politicians and future firm performance changes. Fourth, the results are robust to controls for corporate political contributions. Cooper, et al (2010) find that corporate political contributions are related to improvements in future operating performance. When we include a control for corporate political contributions, we find that it does not affect our results. Fifth, the results in table 6 are generally consistent across industries. We break firms into Fama-French 5, 10, and 17-industry portfolios and repeat the analysis in table 6 separately for each industry. The statistical significance varies across industries but we generally find that individual political contributions are positively associated with firm performance across most industries.<sup>10</sup>

At this point, our results simply establish a positive correlation between individual political contributions and firm performance. To argue causality, we next attempt to identify instances where the positive relation between individual contributions and firm performance should be stronger under our hypothesis but absent or of the reverse sign under the reverse causality explanation.

## 4.2. Subsample analysis

Our first two tests are based on the argument in section 3 that individuals should be particularly motivated to invest in political capital during bad economic times. We present evidence consistent with

<sup>&</sup>lt;sup>10</sup> Healthcare is the only industry in the Fama-French 5 and 10 industry portfolios for which the relation between individual political contributions and firm performance is negative.

this hypothesis in table 5. So, if individual political contributions are more likely during bad times and if these contributions, in turn, are beneficial to firms, the relation between political contributions and firm performance should be stronger in subsamples of poorly performing firms. Note that under the reverse causality explanation, we expect the opposite. If individual political participation is a form of a normal consumption good, the positive relation between individual political contributions and firm performance should be stronger when firms and nearby residents are doing well.

Table 7 presents the results. In panels A.1 and A.2 we sort firms into lagged performance quintiles and analyze the relation between individual political contributions and firm performance separately for each quintile. Firms are sorted into quintiles based on lagged ROA changes (i.e. changes from t-2 to t-1), with the worst performing firms placed in quintile 1 and the best performing firms placed in quintile 5.<sup>11</sup> Panel A.1 presents the ROA analysis; panel A.2 presents the market-to-book analysis. In the interest of space, we present the coefficients on the political contributions variables only.

The evidence in both panels is consistent with our hypothesis. The coefficient on  $Ln(EDDC_{it-1})$  is the most significant, both statistically and economically, for firms in the lowest performance quintile and declines rather noticeably as we move to higher quintiles. In fact, for firms in the highest quintile, the relation between individual political contributions and future performance changes, while still positive, is never statistically or economically significant. This is inconsistent with the reverse causality explanation. If individuals were making political contributions because the nearby firms (and hence the individual contributors themselves) were doing well, we would expect the relation between contributions and firm performance to be the strongest for the best performing firms. There is also no discernible pattern in the  $Ln(C_{it-1})$  coefficient as we move from low to high performance quintiles. Under the reverse causality, we would expect the coefficient to be more positive for higher quintiles.

In panels B.1 and B.2, we sort firms by their distress likelihood. We measure distress likelihood by the Altman's Z-score and classify firms as distressed if their Z-score is less than 1.8, as grey if their Z-score is between 1.8 and 3 and as healthy if their Z-score is above 3. Panel B.1 presents the ROA analysis; panel B.2 presents the market-to-book analysis.

The results are again consistent with our hypothesis. The coefficient on  $Ln(EDDC_{it-1})$  is statistically significant for all firms, but is much more economically significant for distressed and grey firms. In panel B.1, for example, a one standard deviation increase in the number of political contributions to economically relevant politicians results in a 0.42% greater increase in future industryadjusted ROA for healthy firms and a much larger 0.83% and 0.68% greater increase in industry-adjusted ROA for grey and distressed firms, respectively. Thus, compared to healthy firms, grey and distressed firms exhibit a 97.6% and a 61.9% greater sensitivity of future performance to individual political

<sup>&</sup>lt;sup>11</sup> We obtain similar results when prior performance is measured by lagged market-to-book changes.

contributions. The results in other specifications are similar. Under the reverse causality explanation, we would expect a stronger relation between political contributions and firm performance for a portfolio of healthy firms.

We next switch our focus from the subsamples of firms that should especially benefit from individual political contributions to the subsample of politicians who should be more likely to promise favors in exchange for political contributions. A number of studies argue theoretically and show empirically that politicians in close races raise more campaign financing (Jacobson (1980), Kau, Keenan, and Rubin (1982), Jacobson (1985), Poole and Romer (1985), Stratmann (1991)). One explanation for this relation is that the marginal dollar of contributions matters more to a politician in a close race against a strong opponent. Hence, a politician running in a close race may promise more favors to contributors to attract more campaign financing. The assumption that a politician may promise favors in exchange for contributions is made in a number of theoretical arguments including Coate (2004) and has received empirical support (Stratmann (1998), Stratmann (2002), for example).<sup>12</sup>

Based on this argument, the relation between individual political contributions and firm performance should be stronger in subsamples of contributions in close elections. For each politician in our sample we collect from the FEC the percentage of votes received in his / her (re)election campaign. We average that percentage across all candidates who receive contributions from each CD and sort the averages into quintiles. CDs that contribute on average to politicians in close elections are placed in quintile 1 and CDs that contribute to politicians in the biggest landslides are placed in quintile 5. We then analyze the relation between political contributions and firm performance for a subsample of contributions made in close races and all other races.

Table 8 presents the results. Panel A presents the ROA analysis; panel B presents the market-tobook analysis. The evidence in both panels is consistent with our hypothesis. Political contributions in close elections are significantly more positively related to future firm performance compared to contributions made in other elections. All coefficients on contributions in close elections are economically and statistically significant. In comparison, the coefficients on contributions in other elections are statistically indistinguishable from zero. Economically they are also much smaller. For example, in panel B, firm performance is twice as sensitive to the number of individual contributions in close elections compared to other elections (0.0217 vs. 0.0101) and is five times as sensitive to the amount of contributions in close elections compared to other elections (0.0280 vs. 0.0052). It is difficult

<sup>&</sup>lt;sup>12</sup> In a related study, Houser and Stratmann (2008) show in an experimental setting that high-quality candidates are elected less often when their campaigns are financed by special interests. The victory margin is also decreasing in special interest groups' campaign financing. These results imply that voters take into account the sources of campaign financing and are skeptical of politicians who receive money from special interests because of the possibility of quid-pro-quo arrangements between the politicians and the contributors.

to imagine (at least for us) why such results would hold under the reverse causality explanation, which would require that individuals residing nearby well-performing firms are somehow compelled to contribute more but only in close elections.

The results in this section provide stronger evidence of a causal relation between individual political contributions and future firm performance. We next set the bar even higher and look for an exogenous change in the economic dependence status of a CD that should lead under our hypothesis to changes in the CD political contribution practices and to changes in the relation between political contributions to economically relevant politicians and future firm performance.

# 4.3. Exogenous changes in the CD economic dependence status

Mergers between companies that operate in different locations and in different industries represent a convenient setting in which to examine whether changes in the CD economic dependence status alter the relation between individual political contributions and firm performance. When a bidder acquires a target from another location and another industry, especially a target that is large and therefore is more economically relevant to the bidder, individuals in both locations should change their contribution practices if they strategically target economically relevant politicians. If contributions, in turn, impact performance, there should be a positive relation between contributions from the new location and firm performance post-merger.

We obtain data on mergers between public bidders and public targets from the Securities Data Corporation (SDC) for the period 1991 – 2008. We exclude transactions in which the bidder and the target are from the same CD and the same 4-digit SIC industry and transactions in which the bidder owns more than 30 percent of the target prior to the merger or less than 50 percent of the target after the merger. Finally, we only consider mergers of equals, defined as mergers in which the bidder's and the target's total assets in the year prior to the merger are within 20 percent of each other. The final merger sample includes 1,051 mergers.

Table 9 analyzes changes in individual contribution practices around mergers in our sample. We consider annual contributions from the bidder and the target CDs to the bidder and the target economically relevant politicians (i.e. politicians with jurisdictional authority over the bidder's and the target's industry). To avoid any contemporaneous effects of the merger, we define the pre-merger period as the period up to 12 calendar months before the merger announcement date; we define the post-merger period as the period at least 24 calendar months after the merger effective date. Panel A presents changes in the annual frequency of contributions around mergers; panel B presents changes in the annual contribution amount.

Individuals increase their contributions to economically relevant politicians from before to after the merger announcement. All differences in the pre- and post-merger contribution intensities are positive and statistically significant. What is particularly noteworthy is that contributions from the target CDs to economically relevant politicians of bidders and contributions from the bidder CDs to economically relevant politicians of targets increase more dramatically than other contributions. For example, the average annual frequency of contributions from the bidder CDs to politicians who are economically relevant for target firms increases from 51.31 contributions to 100.00 contributions from before to after the merger. This represents a 94.9 percent jump, a result that is statistically highly significant. Similarly, the frequency of contributions from the target CDs to economically relevant politicians of the bidders increase from 59.08 to 92.44, which represents a 56.5 percent jump. When compared to increases in contributions from the bidder (target) CDs to economically relevant politicians of bidders (targets) of 28.5 percent (52.4 percent), the results are also economically significant.

Table 10 analyzes the relation between political contributions from the bidder and the target CDs to economically relevant politicians of bidders and targets and operating performance of bidders.<sup>13</sup> To capture the change in the sensitivity of firm performance to political contributions from before to after the merger, we interact all political contribution variables with a post-merger indicator (*Post*) set to one for observations during the post-merger period and zero otherwise. As in the previous tables, we estimate four models relating the frequency and the amount of contributions to future changes in industry-adjusted ROA and market-to-book ratios. Panel A presents the ROA analysis; panel B presents the market-to-book analysis.

The results are consistent with our hypothesis. First, contributions from the bidder CD to the bidder's economically relevant politicians are positively related to bidder performance before and after the merger. This result is similar to the results in table 6 and indicates that political contributions from economically dependent CDs are an important determinant of future firm performance. Second, there is a pronounced increase in the sensitivity of bidder performance to contributions from the target (bidder) CD to economically relevant politicians of the bidder (target) as well as to contributions from the target CD to its own economically relevant politicians from before to after the merger. For example, in panel A columns 4-5, a one standard deviation increase in target CD contributions to the bidder's economically relevant politicians has no impact on bidder performance prior to the merger (the coefficient on  $Ln(^{Tar}EDDC^{Bid})$  is an insignificant -0.0011) but a significant positive impact on bidder performance after the merger (the coefficient is a significant 0.0032). Similarly, target CD contributions to the target's economically relevant politicians have no impact on bidder performance prior to the merger (the merger (the coefficient)

<sup>&</sup>lt;sup>13</sup> Because targets disappear after the merger, we are unable to compare the relation between political contributions and target operating performance from before to after the merger.

coefficient is insignificant at -0.0016) and a marginally positive impact on bidder performance after the merger (the coefficient is 0.0036). It is also noteworthy that contributions from bidder CDs to the target's economically relevant politicians become relevant, if not always statistically but always economically, after the merger.

Overall, the results in tables 9 and 10 are consistent with our hypothesis that individuals strategically change their contribution practices and begin to target politicians who become economically relevant as a result of a merger with a firm from another industry. In turn, these new contributions become relevant for firm performance post-merger.

# 5. Conclusion

In this paper, we present evidence that individuals pursue economic motives when making political contributions to members of Congress. We exploit the geographic clustering of industries and the differences in Congressional committee jurisdictions to construct various measures of economic dependence of Congressional districts (CD) on different politicians. We then analyze whether political contributions are systematically related to these measures of CD economic dependence. We find a strong positive relation between measures of CD economic dependence and the probability of contributions to economically relevant politicians, as well as the frequency and the amount of these contributions. We find that the results are robust across different Congressional committees and stronger for committees with a greater geographic clustering of firms. We also find that the results are robust across states and stronger in states with a greater number of large firms and in states with a greater geographic clustering of firms. Finally, we find that the relation between the CD economic dependence status and the contribution intensity is stronger in states with high unemployment. Because individuals should be more likely to seek political support when they are more economically dependent on politicians and in bad economic times, our results are consistent with the hypothesis that individuals pursue strategic economic motives when making contributions decisions.

We also document that contributions to economically relevant politicians are associated with improvements in operating performance of firms under the jurisdiction of these politicians. We find that ROA and market-to-book changes are systematically positively related to the frequency and the amount of political contributions to economically relevant politicians. This relation is stronger for poorly performing firms and firms closer to financial distress. These results are consistent with our hypothesis as the need to seek political support should be stronger during bad economic times. We also find that the relation between political contributions and firm performance is stronger for political contributions made in close races. This result is also consistent with our hypothesis given that the politician's desire for contributions and, therefore, his/her willingness to trade political favors for contributions is stronger in

close elections against a strong opponent. Finally, we find that individuals change their contribution practices in response to an exogenous shock to their economic dependence status. In turn, these changes are associated with future improvements in firm performance.

The results in this paper imply that individual political contributions have a positive impact on operating performance of firms located in close proximity of contributing individuals. One question that we are unable to comment on in this paper concerns the exact mechanism behind our documented effect. Given the sheer scale of our study, we suspect that the answer to this question is rather extensive and complex. What we can say is that political contributions appear valuable, not only when they are made by the firm itself but also by individuals who are economically dependent on that firm. Our hope is that future research will analyze the sources of our documented effect further.

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# Appendix A

The Census Bureau provides cartographic boundary files for the Congressional Districts (CDs) during the  $103^{rd}$  to  $110^{th}$  Congress in shape file (.shp) format. We import all shape files in the ArcGIS<sup>®</sup> 9.2 software and assign to each of the files the Geographic Coordinate System North American Datum 1983, with Greenwich prime meridian, and degree angular unit. We then use the ArcGIS<sup>®</sup> geometry calculator to determine the centroid of each zip code. The geometric centroid, or geometric center, of a two-dimensional shape *A* is given by the intersection of all straight lines that divide *A* into two parts of equal moment about the line. In other words, it equals the arithmetic mean of all points of *A*. The centroid is defined by the longitude and latitude (*x*, *y*) expressed in decimal degrees.

Each CD contains one or more zip codes. If the centroid of the zip code falls into the geographic boundaries of a CD, the zip code is assigned to that CD. Table A.1 below provides an example of the zip code assignment to its respective CD. Figure A.1 shows Alabam's 7<sup>th</sup> Congressional district and its 100 zip codes.

State	CD	Zip code	Longitude	Latitude
Alabama	07	35203	-86.81	33.51
Alabama	07	35212	-86.75	33.54
Alabama	06	35209	-86.81	33.46

Table A.1Assignment of zip codes to CDs

Finally, the FEC and Compustat provide the zip codes of individuals making political contributions and of firms' headquarters, respectively. The zip code of each contribution and of each firm headquarters is merged with the list of all zip codes of all CDs. Table 2 shows an example of firm headquarters assignments.

Table A.2Assignment of firms to a CD through zip code

Firm	State	Zip code	CD
Superior Bancorp	AL	35203	07
Alabama Gas Corp.	AL	35203	07
Alabama Aircraft Industries	AL	35212	07
ProAssurance Corp.	AL	35209	06

Figure A.1 The map of Alabama's 7<sup>th</sup> CD, and the 100 zip codes within the CD's boundaries



# Appendix B

Table B.1 below lists the Senate and House committees and their industry jurisdictions. Industry jurisdictions are from the Congressional committees' websites and are supplemented with data on committee jurisdiction from the Center for Responsive Politics. We first match the jurisdiction data with the Fama-French 48 industry definitions and then verify and supplement the matching with 4-digit SIC code definitions.

Senate committee	FF-48 industry	Additional industries defined at the SIC 4-digit level
Agriculture, Nutrition, and Forestry	Agriculture Food Smoke	0800 – 0899 (Forestry) 5143, 5450, 5451 & 2020 (Dairy products and stores) 5144, 2015 (Poultry and eggs) 6220 – 6221 (Commodity brokers & dealers)
Armed Services Banking, Housing, and Urban Affairs	Guns Banks Construction Health Insurance Real estate Trading	3721, 3720, 3724, 3728 (Aircraft, engine and parts)
Commerce, Science, and Transportation	Aero Autos Fun Insurance Meals Oil Telecomm Transportation	4520, 4522, 4512 (Air transport) 5146, 0920, 0921, 0900, 0910 (Commercial fishing and wholesale) 3740, 3743 (Railroad equipment) 3730 – 3731 (Ship building and repair) 7510, 7515 (Auto and truck rental)
Energy and Natural Resources	Mines Oil Utilities	0800 – 0899 (Forestry) 5093 (Scrap and waste materials)
Environment and Public Works	Autos Building materials Chemicals Construction Mines Oil Utilities	5146, 0920, 0921, 0900, 0910 (Commercial fishing and wholesale) 1520, 1540, 1541, 1521, 1542, 1522 (General contractors) 7510, 7515 (Auto and truck rental) 5093 (Scrap and waste materials)

# Table B.1 Congressional committee jurisdictions

House committee	FF 48- industry	Additional industries defined at the SIC 4-digit level
Agriculture	Agriculture Food Smoke	0800 – 0899 (Forestry) 5143, 5450, 5451 & 2020 (Dairy products and stores) 5144, 2015 (Poultry and eggs) 6220 – 6221 (Commodity brokers & dealers)
Armed Services/National Security	Guns	3721, 3720, 3724, 3728 (Aircraft, engine and parts)
Financial Services	Banks Construction Health Insurance Real estate Trading	
Energy and Commerce	Autos Chemicals Utilities Health Meals Mines Oil Drugs Medical equipment Fun Telecomm	5093 (Scrap and waste materials)
Resources/Natural Resources	Mines Oil	5146, 0920, 0921, 0900, 0910 (Commercial fishing and wholesale) 0800 – 0899 (Forestry)
Transportation and Infrastructure	Aero Autos Construction Building materials Transportation	4520, 4522, 4512 (Air transport) 1520, 1540, 1541, 1521, 1542, 1522 (General contractors) 3740, 3743 (Railroad equipment) 3730 – 3731 (Ship building and repair) 7510, 7515 (Auto and truck rental)
Merchant Marine and Fisheries		5146, 0920, 0921, 0900, 0910 (Commercial fishing and wholesale)

# Table B.1 - continued

# Figure 1 Political contributions from the Microsoft Political Action Committee and from individuals in Microsoft's Congressional district, 1991 – 2006

The data is from the FEC detailed contributions files for the period 1991 – 2006. Panel A presents monthly contribution totals to all political candidates made by the Microsoft political action committee (PAC). Panel B presents monthly contribution totals to all political candidates made by individuals residing in the Microsoft's Congressional district. Vertical bars represent dates of important decisions in the Department of Justice's antitrust lawsuit against Microsoft.





Panel B: Contributions from individuals in Microsoft's Congressional district



# Figure 2 Contribution totals by CD, 1991 – 2008

The data is from the FEC detailed individual contributions file for the period 1991 - 2008. We include all contributions to politicians and their (re)election committees. The sample includes 4,874,994 contributions to 8,302 unique political candidates. We assign individual contributions to their Congressional Districts (CD) using the zip code data. The methodology for assigning contributions to their CDs is described in section 2 and appendix A. The figure plots total contribution amounts by each CD for the entire sample period.



# Figure 3 Contribution totals to the Armed Services and Agriculture committees, 1991 – 2008

The data is from the FEC detailed individual contributions file for the period 1991 - 2008. We include all contributions to politicians and their (re)election committees. The sample includes 4,874,994 contributions to 8,302 unique political candidates. We assign individual contributions to their Congressional Districts (CD) using the zip code data. The methodology for assigning contributions to their CDs is described in section 2 and appendix A. The figure plots total contribution amounts to members of the House and Senate Armed Services committees (panel A) and to members of the House and Senate Agriculture committees (panel B) by CD for the entire sample period. The figure also maps the locations of the 25 largest government contractors under the jurisdiction of each committee.



# Figure 3 - continued





# Figure 4 T-statistics from tobit regressions by state, 1991 – 2008

The data is from the FEC detailed individual contributions file for the period 1991 - 2008. We include all contributions to politicians and their (re)election committees. The sample includes 4,874,994 contributions to 8,302 unique political candidates. We assign individual contributions to their Congressional Districts (CD) using the zip code data. The methodology for assigning contributions to their CDs is described in section 2 and appendix A. The figure plots t-statistics from state-by-state tobit regressions of the amount of political contributions from each CD on  $EDD^{Firms}$ .  $EDD^{Firms}$  is defined in equation 2 in section 2 and measures the total number of firms in each CD that operate under the jurisdiction of a given politician. The vertical bars represent the total number of Fortune 500 firms located in each state.



# Table 1Congressional district contribution characteristics, 1991 - 2008

The data is from the FEC detailed individual contributions file for the period 1991 - 2008. We include all contributions to politicians and their (re)election committees. The sample includes 4,874,994 contributions to 8,302 unique political candidates. We assign individual contributions to their Congressional Districts (CD) using the zip code data. The methodology for assigning contributions to their CDs is described in section 2 and appendix A. The table reports CD contribution characteristics per CD per election cycle. All contribution amounts in the left side of the table are in 12/2008 dollars.

	Amount of contributions per election cycle						Number of supported candidates per election cycle					
Variable	Mean	Min	25 <sup>th</sup> Per	Median	75 <sup>th</sup> Per	Max	Mean	Min	25 <sup>th</sup> Per	Median	75 <sup>th</sup> Per	Max
Total contributions	\$875,356	4,573	300,657	528,640	969,925	19,610,903	104	4	52	79	125	883
Candidates												
Democrats	433,242	6,981	101,936	213,470	453,719	13,731,011	52	1	22	38	63	491
Republicans	435,047	4,204	142,518	280,456	519,753	8,411,722	49	1	26	38	59	414
Races												
House	412,473	1,786	150,730	274,388	496,191	6,341,969	65	1	30	46	75	690
Senate	390,084	1,363	82,439	183,900	413,555	12,723,660	34	1	17	28	44	174
Congressional committee	ees											
Appropriations	63,541	197	5,335	17,841	57,186	1,929,710	6	1	3	4	8	26
Small Business	54,445	197	4,289	13,561	48,057	2,070,840	5	0	2	4	6	18
Armed Services	54,201	911	4,023	13,706	50,499	3,300,991	5	0	2	4	6	21
Banking	54,047	552	3,575	12,502	44,944	3,406,934	4	0	2	3	6	19
Judiciary	53,765	142	3,422	11,944	42,188	3,646,303	4	0	2	3	5	17
Commerce	48,984	117	3,976	12,082	40,419	2,084,462	5	1	2	4	6	21
Foreign Relations	48,541	259	3,472	11,019	40,020	1,431,820	4	0	2	3	6	19
Budget	47,307	361	3,740	12,420	40,941	2,042,063	4	0	2	4	6	21
Environment	45,815	371	2,910	9,706	33,884	2,854,661	4	1	2	3	5	18
Labor	42,474	142	3,311	10,179	33,278	2,379,084	4	0	2	3	5	19

# Table 2EDD variables descriptive statistics, 1991 – 2008

The data is from the FEC detailed individual contributions file for the period 1991 - 2008. We include all contributions to politicians and their (re)election committees. The sample includes 4,874,994 contributions to 8,302 unique political candidates. We assign individual contributions to their Congressional Districts (CD) using the zip code data. The methodology for assigning contributions to their CDs is described in section 2 and appendix A. The table presents the descriptive statistics for the economic dependence variables used in the paper. The economic dependence variables are defined in equations 1 - 4 in section 2. Panel A describes the economic dependence variables. Panel B summarizes the total amount of contributions per year made by economically dependent CDs and non-economically dependent CDs to each politician in our sample.

Variable	Mean	Min	25 <sup>th</sup> Per	Median	75 <sup>th</sup> Per	Max
Panel A: Characteristics of economically dependent CDs						
Percent economically relevant politicians (%)	23.99	0	14.29	24.81	33.33	81.25
Number of economically dependent firms	3.74	1	1.50	2.60	4.41	55.63
Assets of economically dependent firms (\$ billions)	3.103	0.002	0.378	0.985	2.957	255.448
Employees of economically dependent firms (thousands)	3.997	0.110	0.307	1.256	3.735	218.286
Panel B: Contribution totals from economically dependent and no	n-dependen	t CDs				
Percent financing raised from economically dependent CDs (%)	18.61	0	0	0	18.75	100.00
Contributions from EDD districts	195.71	1	18	73	196	100,017
Contributions from non-EDD districts	166.67	1	6	32	138	94,854
Amount raised from EDD districts (\$)	157,787	255	12,904	23,103	147,409	9,177,554
Amount raised from non-EDD districts (\$)	125,136	133	4,207	53,387	99,929	5,110,662

#### Political contributions from economically dependent Congressional districts, 1991 – 2008

The data is from the FEC detailed individual contributions file for the period 1991 - 2008. We include all contributions to politicians and their (re)election committees. The sample includes 4,874,994 contributions to 8,302 unique political candidates. We assign individual contributions to their Congressional Districts (CD) using the zip code data. The methodology for assigning contributions to their CDs is described in section 2 and appendix A. For each CD, we compute four measures of its economic dependence. The economic dependence variables are described in equations 1 - 4 in section 2. The table estimates 12 regressions that relate the CD contribution intensity to its economic dependence status. The regression specification in panel A is described in equation 5 in section 3. The regression specification in panel B is described in equation 7 in equation 3. All regressions are estimated with CD and politician fixed effects. Each regression includes 624,071 observations from CDs and politicians with a non-zero within-CD and within-politician variation in the independent variables. Columns 2 and 3 present the results from the logit model that relates the contribution probability to the CD economic dependence status. Columns 4 and 5 present the results from the poisson model that relates the contribution frequency to the CD economic dependence status. Columns 6 and 7 present the results from the tobit model that relates the contribution total amount to the CD economic dependence status. We estimate each model for every year of data and then average the coefficients across years and compute standard errors from the time-series variation in parameter estimates. Standard errors (SE) are reported in parentheses. <sup>a</sup>, <sup>b</sup>, <sup>c</sup>, indicates significance at the 1%, 5%, and 10% level, respectively.

-	Logit		Poisson		Tobit		
Variable	Parameter	SE	Parameter	SE	Parameter	SE	
Panel A: Main results							
EDD	0.0322 <sup>c</sup>	(0.0159)	0.1004 <sup>a</sup>	(0.0259)	230.47 <sup>c</sup>	(113.54)	
$EDD^{Firms}$	$0.0075^{a}$	(0.0009)	0.0104 <sup>a</sup>	(0.0021)	104.60 <sup>a</sup>	(16.66)	
$EDD^{Assets}$	0.0004 <sup>a</sup>	(0.0001)	0.0011 <sup>a</sup>	(0.0003)	10.11 <sup>a</sup>	(2.57)	
$EDD^{Employees}$	$0.0005^{a}$	(0.0002)	0.0004	(0.0003)	6.36 <sup>a</sup>	(1.60)	
Panel B: Interactions w	ith politician's own	n district indicate	or -				
EDD	0.0147	(0.0159)	0.0154	(0.0197)	57.65	(122.91)	
$EDD \times OD$	0.1677 <sup>c</sup>	(0.0885)	-0.0567	(0.0405)	1,761.98	(2,020.86)	
$EDD^{Firms}$	0.0072 <sup>a</sup>	(0.0010)	$0.0077^{a}$	(0.0012)	75.20 <sup>a</sup>	(12.70)	
$EDD^{Firms} \times OD$	0.0501 <sup>a</sup>	(0.0140)	-0.0107 <sup>b</sup>	(0.0045)	803.87 <sup>b</sup>	(319.49)	
$EDD^{Assets}$	$0.0004^{a}$	(0.0001)	0.0009 <sup>a</sup>	(0.0003)	6.50 <sup>a</sup>	(1.56)	
$EDD^{Assets} \times OD$	$0.0085^{b}$	(0.0030)	-0.0012 <sup>a</sup>	(0.0004)	101.04 <sup>b</sup>	(38.57)	
$EDD^{Employees}$	0.0004 <sup>b</sup>	(0.0002)	0.0006 <sup>b</sup>	(0.0003)	3.36 <sup>b</sup>	(1.17)	
$EDD^{Employees} \times OD$	0.0066 <sup>b</sup>	(0.0024)	-0.0015 <sup>b</sup>	(0.0005)	59.23 <sup>b</sup>	(23.74)	

# Political contributions to members of select committees from economically dependent Congressional districts, 1991 – 2008

The data is from the FEC detailed individual contributions file for the period 1991 - 2008. We include all contributions to politicians and their (re)election committees. The sample includes 4,874,994 contributions to 8,302 unique political candidates. We assign individual contributions to their Congressional Districts (CD) using the zip code data. The methodology for assigning contributions to their CDs is described in section 2 and appendix A. For each CD, we calculate the total number of firms in each CD that operate under the jurisdiction of a given politician,  $EDD^{Firms}$  as in equation 2 in section 2. The table estimates logit, poisson, and tobit regressions relating the CD contribution intensity to  $EDD^{Firms}$ . We report the results separately for each Congressional committee in our sample. The Congressional committees and their industry jurisdictions are defined in table B.1 in appendix B. Columns 2 and 3 present the results from the logit model that relates the contribution frequency to  $EDD^{Firms}$ . Columns 4 and 5 present the results from the tobit model that relates the contribution total amount to  $EDD^{Firms}$ . We estimate a pooled version of equation 5 with a year fixed effect also included in the model. Standard errors in parentheses are clustered at the CD level. <sup>a</sup>, <sup>b</sup>, <sup>c</sup>, indicates significance at the 1%, 5%, and 10% level, respectively.

	Logit		Poisson		Tobit		
Committee	EDD <sup>Firms</sup>	SE	EDD <sup>Firms</sup>	SE	EDD <sup>Firms</sup>	SE	
Agriculture	0.0534 <sup>b</sup>	(0.0236)	0.0019	(0.0431)	158.95 <sup>b</sup>	(57.52)	
Armed Services	0.1795 <sup>a</sup>	(0.0254)	0.0549 <sup>a</sup>	(0.0119)	397.41 <sup>a</sup>	(83.80)	
Banking	0.0350 <sup>a</sup>	(0.0053)	0.0044	(0.0033)	208.40 <sup>a</sup>	(57.61)	
Commerce	0.0168 <sup>a</sup>	(0.0036)	0.0138 <sup>b</sup>	(0.0051)	129.08 <sup>a</sup>	(35.63)	
Environment <sup>+</sup>	$0.0227^{a}$	(0.0050)	0.0163 <sup>a</sup>	(0.0053)	119.84 <sup>b</sup>	(55.16)	
Transportation	0.0240 <sup>a</sup>	(0.0042)	0.0178 <sup>a</sup>	(0.0043)	233.16 <sup>a</sup>	(40.12)	

<sup>†</sup> The Environment group consists of the House Merchant Marine and Fisheries Committee, the House Natural Resources Committee, the Senate Energy and Natural Resources Committee, and the Senate Environment and Public Works Committee.

# Political contributions from economically dependent Congressional districts with low and high unemployment, 1991 – 2008

The data is from the FEC detailed individual contributions file for the period 1991 - 2008. We include all contributions to politicians and their (re)election committees. The sample includes 4.874,994 contributions to 8,302 unique political candidates. We assign individual contributions to their Congressional Districts (CD) using the zip code data. The methodology for assigning contributions to their CDs is described in section 2 and appendix A. For each CD, we compute four measures of its economic dependence. The economic dependence variables are described in equations 1 - 4 in section 2. The table estimates 12 regressions that relate the CD contribution intensity to its economic dependence status. The regressions in panel A are estimated on a subsample of CDs in states with low unemployment. The regressions in panel B are estimated on a subsample of CDs in states with high unemployment. Low (high) unemployment states are states with unemployment rates below (above) the national unemployment rate. The unemployment data is from the U.S. Bureau of Labor Statistics. Columns 2 and 3 present the results from the logit model that relates the contribution probability to the CD economic dependence status. Columns 4 and 5 present the results from the poisson model that relates the contribution frequency to the CD economic dependence status. Columns 6 and 7 present the results from the tobit model that relates the contribution total amount to the CD economic dependence status. We estimate each model for every year of data and then average the coefficients across years and compute standard errors from the time-series variation in parameter estimates. Standard errors (SE) are reported in parentheses. <sup>a</sup>, <sup>b</sup>, <sup>c</sup>, indicates significance at the 1%, 5%, and 10% level, respectively.

	Logit		Poisson		Tobit					
Variable	Parameter SE		Parameter	SE	Parameter	SE				
Panel A: Congressional districts in states with low unemployment										
EDD	0.0620 <sup>b</sup>	(0.0256)	0.0430	(0.0342)	226.58	(229.82)				
$EDD^{Firms}$	0.0165 <sup>a</sup>	(0.0037)	0.0113 <sup>a</sup>	(0.0035)	65.82 <sup>a</sup>	(20.84)				
$EDD^{Assets}$	0.0017 <sup>b</sup>	(0.0006)	0.0009	(0.0020)	16.66 <sup>b</sup>	(7.70)				
$EDD^{Employees}$	0.0006 <sup>c</sup>	(0.0003)	0.0001	(0.0005)	1.69	(3.62)				
Panel B: Congression	nal districts in states v	vith high unemp	loyment							
EDD	0.0092	(0.0399)	0.1806 <sup>a</sup>	(0.0446)	535.92 °	(295.79)				
$EDD^{Firms}$	0.0058 <sup>a</sup>	(0.0015)	0.0135 <sup>a</sup>	(0.0031)	182.57 <sup>a</sup>	(36.47)				
$EDD^{Assets}$	0.0006 <sup>c</sup>	(0.0003)	0.0012 <sup>a</sup>	(0.0003)	18.15 <sup>a</sup>	(4.83)				
$EDD^{Employees}$	$0.0007^{a}$	(0.0002)	0.0002	(0.0007)	17.02 <sup>a</sup>	(4.17)				

# Table 6Firm operating performance as a function of individual political contributions, 1991 – 2008

The political contributions data is from the FEC detailed individual contributions file for the period 1991 - 2008. We include all contributions to politicians and their (re)election committees. The sample includes 4,874,994 contributions to 8,302 unique political candidates. We calculate two measures of contribution intensity. The first measure,  $EDDC_{it-1}$ , is the frequency and the amount of contributions made by individuals in firm *i*'s Congressional district to economically relevant politicians, i.e. politicians who serve on Congressional committees with jurisdiction over firm *i*'s industry. The second measure,  $C_{it-1}$ , is the frequency and the amount of contributions made by individuals in firm *i*'s Congressional district to all other politicians. We merge our contributions variable with Compustat. The merged sample is 99,501 firm-years for the period 1991 - 2008. We then regress industry-adjusted ROA and market-to-book changes on the political contributions measures and other control variables. All variables are defined in section 4. Panel A presents the results for the ROA regressions. Panel B presents the results for the market-to-book regressions. Standard errors are adjusted for heteroskedasticity and clustered by firm and year and are reported in parentheses. <sup>a</sup>, <sup>b</sup>, <sup>c</sup>, indicates significance at the 1%, 5%, and 10% level, respectively.

_	Frequency of contributions						Amount of contributions					
Variable	Parameter	SE	Parameter	SE	Parameter	SE	Parameter	SE	Parameter	SE	Parameter	SE
Panel A: ROA analy	vsis											
Intercept	-0.0024	(0.0022)	-0.0023	(0.0022)	-0.0023	(0.0022)	-0.0024	(0.0022)	-0.0023	(0.0022)	-0.0023	(0.0022)
Ln(Q)	0.0027	(0.0021)	0.0030	(0.0021)	0.0029	(0.0020)	0.0027	(0.0021)	0.0030	(0.0021)	0.0029	(0.0021)
Ln(Size)	-0.0041 <sup>b</sup>	(0.0019)	-0.0045 <sup>b</sup>	(0.0019)	-0.0045 <sup>b</sup>	(0.0019)	-0.0041 <sup>b</sup>	(0.0019)	-0.0045 <sup>b</sup>	(0.0019)	-0.0045 <sup>b</sup>	(0.0019)
$\Delta ROA$	-0.0454 <sup>a</sup>	(0.0114)	-0.0454 <sup>a</sup>	(0.0114)	-0.0454 <sup>a</sup>	(0.0114)	-0.0454 <sup>a</sup>	(0.0114)	-0.0454 <sup>a</sup>	(0.0114)	-0.0454 <sup>a</sup>	(0.0114)
$Ln(C^{Frequency})$	0.0021	(0.0014)			0.0016	(0.0015)						
$Ln(EDDC^{Frequency})$			0.0029 <sup>a</sup>	(0.0005)	0.0026 <sup>a</sup>	(0.0007)						
$Ln(C^{Amount})$							0.0018 <sup>c</sup>	(0.0010)			0.0012	(0.0011)
$Ln(EDDC^{Amount})$									0.0033 <sup>a</sup>	(0.0007)	0.0031 <sup>a</sup>	(0.0008)
Panel B: Market-to-	book analysis											
Intercept	-0.0859 <sup>a</sup>	(0.0270)	-0.0839 <sup>a</sup>	(0.0260)	-0.0837 <sup>a</sup>	(0.0258)	-0.0860 <sup>a</sup>	(0.0271)	-0.0833 <sup>a</sup>	(0.0257)	-0.0831 <sup>a</sup>	(0.0257)
CAPX	-0.1136 <sup>a</sup>	(0.0337)	-0.1266 <sup>a</sup>	(0.0379)	-0.1271 <sup>a</sup>	(0.0380)	-0.1137 <sup>a</sup>	(0.0337)	-0.1266 <sup>a</sup>	(0.0380)	-0.1267 <sup>a</sup>	(0.0380)
RD / A	-0.1171 <sup>b</sup>	(0.0471)	-0.1112 <sup>b</sup>	(0.0450)	-0.1105 <sup>b</sup>	(0.0448)	-0.1172 <sup>b</sup>	(0.0472)	-0.1125 <sup>b</sup>	(0.0454)	-0.1123 <sup>b</sup>	(0.0454)
Ln(Size)	-0.1703 <sup>a</sup>	(0.0630)	-0.1786 <sup>a</sup>	(0.0651)	-0.1781 <sup>a</sup>	(0.0649)	-0.1706 <sup>a</sup>	(0.0632)	-0.1791 <sup>a</sup>	(0.0653)	-0.1788 <sup>a</sup>	(0.0652)
ROA	0.0310	(0.0880)	0.0390	(0.0898)	0.0381	(0.0894)	0.0314	(0.0881)	0.0395	(0.0899)	0.0391	(0.0898)
$Ln(C^{Frequency})$	-0.0035	(0.0070)			-0.0198 <sup>c</sup>	(0.0107)						
$Ln(EDDC^{Frequency})$			$0.0770^{a}$	(0.0289)	$0.0811^{a}$	(0.0305)						
$Ln(C^{Amount})$							0.0037	(0.0050)			-0.0114 <sup>c</sup>	(0.0067)
Ln(EDDC <sup>Amount</sup> )									0.0812 <sup>a</sup>	(0.0313)	0.0832 <sup>a</sup>	(0.0321)

## Firm operating performance as a function of individual political contributions for poorly and well performing firms, 1991 – 2008

The political contributions data is from the FEC detailed individual contributions file for the period 1991 - 2008. We include all contributions to politicians and their (re)election committees. The sample includes 4,874,994 contributions to 8,302 unique political candidates. We calculate two measures of contribution intensity. The first measure, *EDDC<sub>it-1</sub>*, is the frequency and the amount of contributions made by individuals in firm *i*'s Congressional district to economically relevant politicians, i.e. politicians who serve on Congressional committees with jurisdiction over firm *i*'s industry. The second measure, *C<sub>it-1</sub>*, is the frequency and the amount of contributions made by individuals in firm *i*'s Congressional district to all other politicians. We merge our contributions variable with Compustat. The merged sample is 99,501 firm-years for the period 1991 – 2008. We sort firms into performance quintiles, with worst performers placed in quintile one and best performers placed in quintile five. Performance is measured by lagged ROA changes. We also calculate the Altman's Z-score for all firms in our sample and place firms in three portfolios based on their likelihood of financial distress. We then regress industry-adjusted ROA and market-to-book changes on the political contributions measures and other control variables separately for each performance quintile and each Z-score portfolio. All variables are defined in section 4. We present the results for the political contributions variables only. Panels A.1 and A.2 presents the results for the performance quintiles. Panels B.1 and B.2 presents the results for the Z-score portfolios. Standard errors are adjusted for heteroskedasticity and clustered by firm and year and are reported in parentheses. <sup>a</sup>, <sup>b</sup>, <sup>c</sup>, indicates significance at the 1%, 5%, and 10% level, respectively.

_		Frequency of	contributions	Amount of contributions					
Portfolio	$Ln(C^{Frequency})$	SE	$Ln(EDDC^{Frequency})$	SE	$Ln(C^{Amount})$	SE	$Ln(EDDC^{Amount})$	SE	
Panel A.1: ROA analysis cond	litional on prior ROA p	erformance							
Low	-0.0004	(0.0016)	0.0061 <sup>b</sup>	(0.0026)	0.0003	(0.0017)	0.0069 <sup>a</sup>	(0.0027)	
2	-0.0004	(0.0008)	0.0034 <sup>a</sup>	(0.0011)	-0.0004	(0.0007)	0.0038 <sup>a</sup>	(0.0012)	
3	0.0002	(0.0012)	0.0029 <sup>b</sup>	(0.0014)	-0.0002	(0.0010)	0.0030 <sup>b</sup>	(0.0014)	
4	-0.0003	(0.0010)	0.0021	(0.0014)	-0.0002	(0.0008)	0.0028 <sup>c</sup>	(0.0015)	
High	0.0003	(0.0014)	0.0004	(0.0016)	0.0003	(0.0013)	0.0011	(0.0019)	
Panel A.2: Market-to-book analysis conditional on prior ROA performance									
Low	-0.0039	(0.0051)	0.0451 <sup>a</sup>	(0.0104)	-0.0024	(0.0027)	0.0428 <sup>a</sup>	(0.0107)	
2	-0.0058	(0.0131)	0.0243 <sup>b</sup>	(0.0105)	0.0017	(0.0115)	0.0217 <sup>c</sup>	(0.0117)	
3	0.0002	(0.0134)	0.0159	(0.0112)	0.0042	(0.0096)	0.0183	(0.0124)	
4	0.0084	(0.0101)	0.0150 <sup>c</sup>	(0.0080)	0.0095	(0.0089)	0.0144 <sup>c</sup>	(0.0080)	
High	-0.0121	(0.0058)	0.0106	(0.0153)	-0.0136 <sup>a</sup>	(0.0021)	0.0106	(0.0160)	
Panel B.1: ROA analysis cond	litional on Altman's Z-s	score							
Distressed	0.0001	(0.0022)	0.0068 <sup>b</sup>	(0.0030)	-0.0010	(0.0009)	0.0094 <sup>a</sup>	(0.0032)	
Grey	0.0003	(0.0010)	$0.0083^{a}$	(0.0010)	0.0003	(0.0009)	$0.0082^{a}$	(0.0011)	
Healthy	0.0019	(0.0014)	0.0042 <sup>a</sup>	(0.0010)	0.0014	(0.0011)	$0.0047^{a}$	(0.0011)	
Panel B.2: Market-to-book an	alysis conditional on A	ltman's Z-scor	e						
Distressed	-0.0217 <sup>a</sup>	(0.0071)	0.0420 <sup>a</sup>	(0.0146)	-0.0130 <sup>a</sup>	(0.0043)	0.0423 <sup>a</sup>	(0.0147)	
Grey	-0.0159 °	(0.0090)	0.0414 <sup>a</sup>	(0.0101)	-0.0120	(0.0075)	0.0430 <sup>a</sup>	(0.0104)	
Healthy	-0.0017	(0.0097)	0.0376 <sup>a</sup>	(0.0063)	0.0017	(0.0076)	0.0353 <sup>a</sup>	(0.0066)	

#### Firm operating performance as a function of individual political contributions in close elections and other elections, 1991 – 2008

The political contributions data is from the FEC detailed individual contributions file for the period 1991 - 2008. We include all contributions to politicians and their (re)election committees. The sample includes 4,874,994 contributions to 8,302 unique political candidates. We calculate two measures of contribution intensity. The first measure, *EDDC*<sub>*it-1*</sub>, is the frequency and the amount of contributions made by individuals in firm *i*'s Congressional district to economically relevant politicians, i.e. politicians who serve on Congressional committees with jurisdiction over firm *i*'s industry. The second measure,  $C_{it-1}$ , is the frequency and the amount of contributions made by individuals in firm *i*'s Congressional district to all other politicians. We merge our contributions variable with Compustat. The merged sample is 99,501 firm-years for the period 1991 – 2008. We sort firms in quintiles based on the closeness of the economically relevant politician's election outcome. Individuals in the firm's CD who contribute to economically relevant politicians in the closest elections are placed in quintile one and individuals in the firm's CD who contribute to economically relevant politicians, so the sample is reduced to 38,463 observations. We regress industry-adjusted ROA and market-to-book changes on the political contributions waitables only. Panel A presents the results for the ROA regressions. Panel B presents the results for the market-to-book regressions. Standard errors are adjusted for heteroskedasticity and clustered by firm and year and are reported in parentheses. <sup>a</sup>, <sup>b</sup>, <sup>c</sup>, indicates significance at the 1%, 5%, and 10% level, respectively.

		Frequency of	f contributions		Amount of contributions				
Portfolio	$Ln(C^{Frequency})$	SE	$Ln(EDDC^{Frequency})$	SE	$Ln(C^{Amount})$	SE	$Ln(EDDC^{Amount})$	SE	
Panel A: ROA analysis									
Contributions in close elections	-0.0028 <sup>c</sup>	(0.0015)	0.0034 <sup>a</sup>	(0.0013)	-0.0033 <sup>a</sup>	(0.0012)	0.0037 <sup>b</sup>	(0.0016)	
Contributions in other elections	0.0012	(0.0009)	-0.0012	(0.0010)	0.0011	(0.0008)	-0.0009	(0.0010)	
Panel B: Market-to-book analysis									
Contributions in close elections	-0.0006	(0.0108)	0.0217 <sup>b</sup>	(0.0102)	-0.0056	(0.0145)	0.0280 <sup>b</sup>	(0.0134)	
Contributions in other elections	0.0014	(0.0039)	0.0101	(0.0069)	0.0024	(0.0036)	0.0052	(0.0070)	

# Table 9Changes in CD political contribution intensity around mergers, 1991 – 2008

The political contributions data is from the FEC detailed individual contributions file for the period 1991 - 2008. We include all contributions to politicians and their (re)election committees. The original sample includes 4,874,994 contributions to 8,302 unique political candidates. We intersect this sample with a sample of mergers and acquisitions for the period 1991 - 2008. The merger sample is from SDC and includes all public bidders and targets that operate in different 4-digit SIC industries and in different Congressional districts (CDs). Further, we select mergers in which the bidder owns less than 30 percent of the target prior to the merger and more than 50 percent of the target after the merger and mergers in which the bidder's and the target's total assets in the year prior to the merger are within 20 percent of each other. The table reports individual political contributions made from the bidder and the target Congressional districts to the bidder's and the target's economically relevant politicians. Economic relevant politicians are individuals who sit on Congressional committees with jurisdiction over the bidder's or the target's industry. We calculate the average annual total number and total amount of contributions made to economically relevant politicians during the pre- and post-merger periods. The pre-merger period is the period up to 12 months prior to the merger announcement. The post-merger period is the period at least 24 months after the merger effective date. Panel A presents the results for the number of contributions during the pre- and post-merger periods. Panel B presents the results for the amount of contributions during the pre- and post-merger periods. The last column is the t-statistic from the t-test for the difference in mean contributions during the pre- and post-merger periods.

Political contributions	Variable label	Pre-merger	Post-merger	difference	t-statistic
Panel A: Contribution frequency					
From bidder CD to bidder politicians	Bid EDDC Bir	95.78	123.10	27.32	2.96
From bidder CD to target politicians	$^{Bid}EDDC^{Tar}$	51.31	100.00	48.69	5.28
From target CD to bidder politicians	$Tar EDDC^{Bid}$	59.08	92.44	33.37	6.39
From target CD to target politicians	$Tar EDDC^{Tar}$	50.64	77.20	26.56	4.50
Panel B: Contribution amount (in \$ thousands)					
From bidder CD to bidder politicians	Bid EDDC Bir	95.28	119.32	24.03	2.18
From bidder CD to target politicians	$^{Bid}EDDC^{Tar}$	42.83	93.84	51.01	5.51
From target CD to bidder politicians	$Tar EDDC^{Bid}$	47.43	83.61	36.18	7.07
From target CD to target politicians	$Tar EDDC^{Tar}$	43.77	73.19	29.41	4.73

# Bidder firm operating performance as a function of individual political contributions received from the bidder and the target CDs, 1991 – 2008

The political contributions data is from the FEC detailed individual contributions file for the period 1991 - 2008. We include all contributions to politicians and their (re)election committees. The sample includes 4,874,994 contributions to 8,302 unique political candidates. We calculate measures of the contribution intensity from the bidder and the target Congressional districts to the bidder's and the target's economically relevant politicians. The contribution variables are described in table 9. We then regress industry-adjusted ROA and market-to-book changes on the four political contributions measures and other control variables. All control variables are defined in section 4. Panel A presents the results for the bidder ROA regressions. Panel B presents the results for the bidder market-to-book regressions. Standard errors are adjusted for heteroskedasticity and clustered by firm and year and are reported in parentheses. <sup>a</sup>, <sup>b</sup>, <sup>c</sup>, indicates significance at the 1%, 5%, and 10% level, respectively.

	Frequency of contributions						Amount of contributions					
Variable	Parameter	SE	Parameter	SE	Parameter	SE	Parameter	SE	Parameter	SE	Parameter	SE
Panel A: ROA analysis during the pre-merger period												
$Ln(^{Bid}EDDC^{Bid})$	0.0026 <sup>a</sup>	(0.0009)			0.0024 <sup>a</sup>	(0.0009)	0.0030 <sup>a</sup>	(0.0011)			0.0028 <sup>a</sup>	(0.0010)
$Ln(^{Bid}EDDC^{Tar})$	-0.0014	(0.0015)					-0.0011	(0.0015)				
$Ln(^{Tar}EDDC^{Bid})$			-0.0011	(0.0017)					-0.0015	(0.0017)		
$Ln(^{Tar}EDDC^{Tar})$			-0.0016	(0.0013)	-0.0016	(0.0012)			-0.0011	(0.0012)	-0.0011	(0.0011)
$Ln(^{Bid}EDDC^{Bid}) \times Post$	-0.0004	(0.0015)			-0.0003	(0.0012)	-0.0008	(0.0013)			-0.0008	(0.0013)
$Ln(^{Bid}EDDC^{Tar}) \times Post$	$0.0032^{\circ}$	(0.0018)					0.0027	(0.0019)				
$Ln(^{Tar}EDDC^{Bid}) \times Post$			0.0032 <sup>a</sup>	(0.0011)					0.0035 <sup>a</sup>	(0.0012)		
$Ln(^{Tar}EDDC^{Tar}) \times Post$			0.0036 <sup>c</sup>	(0.0019)	0.0036 <sup>b</sup>	(0.0018)			0.0033 <sup>c</sup>	(0.0018)	0.0032 <sup>c</sup>	(0.0018)
Panel B: Market-to-book analysis during the pre-merger period												
$Ln(^{Bid}EDDC^{Bid})$	0.0620 <sup>c</sup>	(0.0320)			0.0582 <sup>c</sup>	(0.0317)	0.0583 <sup>c</sup>	(0.0350)			0.0530	(0.0354)
$Ln(^{Bid}EDDC^{Tar})$	-0.0245	(0.0269)					-0.0227	(0.0276)				
$Ln(^{Tar}EDDC^{Bid})$			0.0233	(0.0286)					0.0296	(0.0326)		
$Ln(^{Tar}EDDC^{Tar})$			0.0016	(0.0290)	-0.0000	(0.0292)			0.0056	(0.0306)	0.0066	(0.0312)
$Ln(^{Bid}EDDC^{Bid}) \times Post$	-0.0176	(0.0399)			-0.0019	(0.0410)	-0.0093	(0.0392)			0.0024	(0.0416)
$Ln(^{Bid}EDDC^{Tar}) \times Post$	0.0545 <sup>c</sup>	(0.0303)					0.0374	(0.0326)				
$Ln(^{Tar}EDDC^{Bid}) \times Post$			0.0211	(0.0487)					0.0485	(0.0492)		
$Ln(^{Tar}EDDC^{Tar}) \times Post$			0.0281	(0.0312)	0.0299	(0.0306)			0.0035	(0.0324)	0.0352	(0.0318)