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Does Political Giving Impact Shareholder Wealth? Evidence from State Campaign Finance Reforms

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I am submitting herewith a dissertation written by Douglas Brian Blank II entitled "Does Political Giving Impact Shareholder Wealth? Evidence from State Campaign Finance Reforms." I have examined the final electronic copy of this dissertation for form and content and recommend that it be accepted in partial fulfillment of the requirements for the degree of Doctor of Philosophy, with a major in Business Administration.

Tracie M. Woidtke, Major Professor

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Does Political Giving Impact Shareholder Wealth?
Evidence from State Campaign Finance Reforms

A Dissertation Presented for the
Doctor of Philosophy
Degree
The University of Tennessee, Knoxville

Douglas Brian Blank II
August 2016

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DEDICATION

This dissertation is dedicated to my wife, Kate, for patiently supporting my educational pursuits.

ABSTRACT

Does corporate political giving actually affect shareholder wealth? While firms value political participation, some lawmakers oppose corporate involvement in politics. Yet, the existing literature has established a correlation between campaign finance and corporate outcomes without fully documenting a causal relation. I use an innovative database of political giving to exploit changes in state campaign finance laws as an exogenous shock to political giving. Specifically, I use the staggered adoption of externally imposed legal limits to political giving across U.S. states to expose how shareholder wealth responds. I find shareholder wealth declines following legally imposed reductions in political giving. The causal effect of political giving on shareholder wealth that I find speaks to the larger role of politics in firms and the economy. The results suggest corporate political giving leads to greater shareholder wealth, and reforms reduce corporate political participation, informing the debate around campaign finance reform.

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CHAPTER ONE

INTRODUCTION

Reform of the role of corporations in politics has been ongoing for a century, yet firms continue to participate in the political process, while the impact of reform on firms is unknown (Milyo 1999; Primo & Milyo 2006; Coates 2012). Some policymakers seek to limit corporations in politics to alleviate conflicts arising from special interest groups. Should firms participate in politics? Answering this requires understanding how political engagement affects firms. The literature linking corporations to politics suggests benefits arise from firms financially supporting policy makers, politicians guiding firm decision-making by serving on corporate boards and government leaders awarding valuable contracts to politically active firms (Faccio 2006; Faccio *et al.* 2006; Jayachandran 2006; Faccio & Parsley 2009; Goldman *et al.* 2009; Hill *et al.* 2013a). In particular, corporate financial support of politicians is positively correlated with stock performance, capital access and regulatory approval of acquisitions (Claessens *et al.* 2008; Cooper *et al.* 2010; Perez-Saiz & Semenov 2014).

Since political participation is not randomly assigned but is instead a decision endogenous to the firm, one of the largest hurdles facing the literature of corporate participation in politics is identifying causality. Does political participation help firms succeed or, on the other hand, do successful firms have the resources and motivation to influence the political process? To examine the impact corporate political engagement has on shareholder wealth, I use a quasi-natural experiment from externally imposed campaign finance reforms to attain causal inference and inform the ongoing debate over reform.

The staggered adoption of campaign finance reforms across U.S. states from 1988 to 2010 results in time-varying state-level law changes requiring declines in campaign finance activity for some firms.¹ Since campaign financing for state politicians is overseen by the state of the government office, I examine financing of state political campaigns by firms in states enacting campaign finance reforms (treatment) and compare them to otherwise similar firms in states without reforms (control). I use these events as an exogenous shock to examine the importance of political participation for firms. I utilize a difference-in-differences (DiD) approach analyzing the interaction of the post (relative to the pre) reform period and treatment (relative to control) firms. Consistent with the view that political involvement benefits firms, I observe a negative shock in shareholder wealth for treatment firms relative to control firms around reforms to political contribution limitations (i.e., to treatment firms in response to plausibly exogenous declines in political participation).

My empirical approach necessitates a measure of political participation, so I define political giving as contributions made by political action committees dedicated to a firm, which are the mechanism firms use to finance politicians' campaigns.² I develop an innovative database of state political giving to identify firms forced to lower political giving and examine how shareholder wealth responds. The National Institute for Money in State Politics provides data on state campaign finance activity, which are critical to exploit state reforms. Campaign finance reforms typically impose new political giving limits, which offer plausibly exogenous declines in

¹ State campaign finance reforms have also been used as a quasi-natural experiment to test causal inferences in the public choice literature on election competition (Stratmann & Aparicio-Castillo 2006).

² Political action committees are the primary mechanism for firms to participate in campaign finance, since government regulators (e.g., Federal Election Commission) prohibit corporate treasuries from giving funds directly to political campaigns (Epstein 1980).

political giving. As a result, I study reforms establishing new legal limits to political giving that was previously unrestricted.

To examine the impact of the reforms on firms and shareholders, I also require a measure of shareholder wealth, which I proxy for with firm value (*Tobin's Q*) and stock performance (*12-Month Buy-and-Hold Return*). I focus on performance during the four years following the reforms and compare it to the four years prior to reforms. I also analyze alternative measures with similar results. The economic magnitude of the results suggests the effect of limiting political giving is substantive, as shareholders of treatment firms exhibit an average decline in wealth of at least 5% following reforms.

In additional analysis, I use a triple differences (difference-in-differences-in-differences, DiDiD) approach to compare firms concentrating political giving in the reform state. I analyze firms with political giving that is more concentrated and find treatment firms with concentrated political giving (i.e., a greater proportion of political giving limited by reforms) are adversely affected significantly more than other treatment firms are. Further, I explore channels where political giving could affect firms and find concentrated treatment firms are approximately 4% less likely to receive government contracts awarded by state governments following reforms, which is not trivial given the average subsidy value in my sample is \$200 million. The results provide evidence political giving impacts shareholder wealth, in addition to offering a specific channel through which the firm is impacted.

The DiD approach rules out many alternative hypotheses. For example, Cooper *et al.* (2010) state that “our finding of a link between contributions and future returns may simply be driven by unobserved firm characteristics that are correlated with contributions and are also the

main cause of increased returns.” My results show the decline in shareholder wealth relates only to treatment firms when political giving becomes restricted following reforms and are most pronounced for treatment firms with concentrated political giving. Therefore, general trends in shareholder wealth over time or effects related to firm characteristics are ruled out as alternative explanations. Further, greater declines at treatment firms with concentrated political giving within a state help alleviate concerns over differences between reform and non-reform states.

One potential concern is the political economy where campaign finance reforms take place. Since the reforms take place across multiple years, plausible alternative explanations must relate to all campaign finance reforms over time. I have carefully reviewed reforms in addition to performing Weibull hazard models where the “failure events” are the adoption of laws restricting political giving to identify determinants. I find no evidence that events are endogenous to firms giving politically or those located in the state enacting reforms. Further, I find no evidence that current or prior economic and political characteristics are significant determinants of reforms as well as the primary cause of declines in shareholder wealth, government subsidy awards or political giving.

I perform additional robustness tests using control firms within the states where reforms take place and find similar results. These tests mitigate concerns regarding differences in control firms that relate to the states where firms are headquartered beyond unobservable state fixed effects. Further, I control for unobservable characteristics related to states, industries and years by using fixed effects. I also measure value using industry adjusted Q and observe similar results. To summarize, the results are robust to using multiple measures of shareholder wealth and using different control samples to control for corporate, geographic and time-specific effects.

Overall, this study contributes to the literature along several dimensions. To my knowledge, it is the first analysis of corporate political activities at both state and federal levels of government. While existing studies primarily focus on federal political giving, the inclusion of corporate political giving to state campaigns allows me to exploit state law changes to infer causality between political giving and shareholder wealth. I document that a greater number of firms give to state politicians than to federal politicians. Moreover, many of the potential benefits from government ties are likely to occur at the state more so than at the federal level.³ Further, this study provides evidence that one channel through which firms benefit from greater political giving is larger government subsidy awards. In addition, this study extends the literature on shock-based causal inference in financial economics by using campaign finance reform to show reforms can lead to changes in wealth for affected firms compared to otherwise similar firms (Atanasov & Black 2014).

I organize the rest of the paper as follows. Chapter two discusses the background and academic literature regarding campaign finance reform and corporate political giving. Chapter three describes the empirical methodology and results before chapter four concludes.

³ See e.g., the 76th Oregon Legislative Assembly's House Bill 4200 by Joint Special Committee on Economic Development from the one-day special session in December 2012 which provided future financial security, suggesting state legislatures have specific interests related to corporations headquartered in the state: <http://www.ocpp.org/media/uploads/documents/2013/2012-specsess-hb4200.en.pdf>.

CHAPTER TWO

CAMPAIGN FINANCE REFORM BACKGROUND AND RELATED LITERATURE

While corporations participate in the political process in many ways, I focus on political giving to campaigns, since this direct access to politicians develops reputational capital for the firm to benefit (Claessens *et al.* 2008; Cooper *et al.* 2010; Perez-Saiz & Semenov 2014; Brown *et al.* 2015). The Federal Election Commission (FEC) and state governments restrict campaign finance through extensive procedures politicians must follow, including disclosure of the source and use of funds. To allow equal access to participants, campaign finance is highly regulated and often includes strict limits. Importantly, corporations are prohibited from giving directly to political campaigns from the corporate treasury (Epstein 1980). However, corporations are allowed to support campaigns through political action committees (PACs) dedicated to the firm, giving from funds separate from the corporate treasury.

Campaign Finance Background

Prior to the Federal Election Campaign Act of 1971, politically active corporations encouraged individuals to donate. However, the regulatory process led to the rise in corporate participation by offering an alternative mechanism for individuals to allocate more capital (Masters & Keim 1985; Conway 1986; Humphries 1991). Since firms are strictly prohibited from allocating corporate funds to political campaigns, firms instead administer PACs to finance political campaigns with “hard” money political giving from corporate PACs. Corporate PACs are firm-specific pools of money dedicated to the firm, associated with the firm stakeholders and stockholders but independent from the corporate treasury. While individual state law varies, most

follow the federal model.⁴ In fact, 11 CFR 102.5(a)(1)(ii) allows federal and state political giving to be made from the same corporate PAC. The FEC regulates all “hard” money, which includes all activities and funds directly financing political campaigns and committees. Alternatively, the FEC defines “soft” money as “money raised outside the limits and prohibitions of federal campaign finance law.” Soft money political giving includes outside expenditures indirectly related to politicians. While other mechanisms like soft money allow firms to participate in the political process, none allow firms direct access to politicians. Further, the literatures on corporate lobbying and soft money campaign finance activities document that executives benefit in the form of additional compensation and firms have agency and free cash flow problems (Aggarwal *et al.* 2012; Skaife *et al.* 2013).

One example of alternative channels for corporations to participate in politics includes independent spending. Independent expenditure-only committees (i.e., “Super PACs”) cannot give to campaigns but instead seek to participate in the political process independently from political campaigns. Importantly, firm specific Super PACs do not exist in the manner that firm-specific PACs do, allowing minimal interaction between firms and politicians through independent spending. Instead, many firms, individuals and organizations all give to the same Super PAC. Further, soft money giving is not campaign-specific, indicating that the spending is not directly linked to any particular political campaigns. The FEC clearly states, “Independent

⁴ The most common legal structure among states follows federal precedent of separate funds, while other states regulate corporations similar to the FEC with similar political giving restrictions. Though some states allow firms to give to political campaigns without organizing a separately segregated fund, much of the regulatory process is similar for firms in these states as well. See e.g. National Conference of State Legislatures’ (NCSL) State Campaign Finance Laws: An Overview: <http://www.ncsl.org/research/elections-and-campaigns/campaign-finance-an-overview.aspx>.

Also, see e.g., the FEC’s Public Records Office Summary of State Campaign Finance Laws: <http://www.fec.gov/pubrec/publicrecordsoffice.shtml>.

expenditures represent spending by individuals, groups, political committees, corporations or unions expressly advocating the election or defeat of clearly identified federal campaigns. These expenditures may not be made in concert or cooperation with, or at the request or suggestion of, a candidate, the candidate's campaign or a political party.”⁵ These restrictions limit direct connections between firms and politicians.

Furthermore, Super PACs are not a prominent financing source of capital for the political channels in my study for several reasons. First, while most state campaign finance activity and laws are similar to those at the federal level, independent expenditures are highly concentrated at the federal level, while state and local elections are financed primarily through campaign expenditures (Stratmann & Aparicio-Castillo 2006). Additionally, independent expenditures are largely funded by individuals rather than corporations (Ansolabehere *et al.* 2003; Briffault 2012; Bonica 2014). In fact, Cooper *et al.* (2010) document that soft money political giving and charitable giving do not influence the relation they observe between shareholder wealth and political giving, though it suffers from endogeneity.

Further, Super PACs were expressly prohibited beginning with the Bipartisan Campaign Reform Act (BCRA) of 2002, until the 2010 ruling by the Supreme Court of the United States in the case between Citizens United and the FEC.⁶ Moreover, prior to 2002, independent

⁵ See e.g., FEC “Independent Expenditure-Only Committees” press release detailing independent expenditure-only committees: http://www.fec.gov/press/press2011/ieoc_alpha.shtml. Additionally, see e.g., the FEC’s “Super PACs and Other Independent Expenditure Filers,” which includes detailed descriptions of independent organizations participating in the political process: http://www.fec.gov/portal/super_pacs.shtml.

⁶ See McCain–Feingold Act, Pub.L. 107–155, 116 Stat. 81, enacted March 27, 2002, H.R. 2356. Also, see e.g., Citizens United v. Federal Election Commission, 558 U.S. 310 (2010). Unfortunately, my primary research design does not benefit from this brief sub period because campaign finance reform halted while the legal process unfolded for BCRA. However, I do perform my analysis on the period prior to 2010 with qualitatively and quantitatively

expenditures were far more limited. In fact, during 2012, independent expenditures were more substantive than the two decades preceding, reaching \$1 billion, while independent expenditures were only \$11 million and \$34 million, respectively during 1992 and 2000.⁷ Therefore, independent expenditures are of little importance prior to 2010. Overall, strict restrictions minimize alternative, unregulated channels linking corporations and politicians such that the primary mechanism connecting corporations to political campaigns is the corporate PAC.

Corporate Political Action Committees

The sole direct mechanism the FEC allows for corporate participation in campaign finance is the corporate PAC. Corporate PACs are separate segregated funds (SSFs). That is, PACs are dedicated to and administered by the firm, but PAC funds are separate from corporate resources. In particular, corporations can create and facilitate political giving to campaigns, so long as the corporate treasury does not fund any political giving (Milyo 1999). Individuals have the opportunity to give both directly to campaigns and to PACs, which in turn give to campaigns. By giving to PACs, individuals are more fully participating in the process through additional eligible channels. Corporate leadership and political advisors administer PACs and determine where to allocate capital. PACs rely on stakeholders and stockholders for funding, namely executives and upper-level management. Corporate treasuries may only provide administrative fees organizing the PAC. Further, corporate PACs cannot incentivize donations but can develop materials illustrating the goals and purpose of the PAC. For example, Microsoft sponsors the

similar results. Similarly, correlations between political giving and firm value persist from 2002 to 2010, though the research design suffers from endogeneity.

⁷ See e.g., the Center for Responsive Politics “Outside Spending,” which documents the various forms of political spending outside of PACs: <https://www.opensecrets.org/outsidespending/index.php?type=Y>.

Microsoft Political Action Committee (MSPAC), which has a website stating, “Corporate participation in the public policy process is an important and essential means of enhancing shareholder value and is fundamental to free and democratic societies.” While employees fund corporate PACs, the political giving is still allocated based upon corporate decisions. In many cases, corporations have committees who evaluate candidate campaign policies and allocate capital accordingly.⁸

While the literature on corporations involved in politics is vast, several studies argue that firms benefit from participating, even though endogeneity issues prevent them from establishing causation due to reverse causality, simultaneity bias, omitted variables and other specification errors. Similarly, the literature specifically focused on corporate political giving directly from PACs to political campaigns shows correlations with corporate outcomes but also suffers from endogeneity. Cooper *et al.* (2010) show that federal political giving is positively associated with both changes in shareholder wealth and certain firm characteristics, including size, profitability, market share and union membership, in addition to industry characteristics. Though they account for the likelihood of giving politically based on firm characteristics, the results incorporate the

⁸ See e.g., NCSL “Political Action Committee Contribution Limits,” which states the following: “If a corporation desired to form a PAC, pooling contributions from its employees or outside sources into a distinct bank account, the PAC can spend money to influence elections in a way the corporation cannot by itself.”

Also, see e.g., Microsoft’s Political Engagement website, which offers an overview: “Microsoft sponsors the Microsoft Political Action Committee (MSPAC), to enable Microsoft employees and shareholders to participate more effectively in the U.S. political process. The committee, created in 1988, informs its members about important issues and government decisions that can affect Microsoft business. It also provides an opportunity for members to collectively support public policy positions that are important to Microsoft and the software industry. As a bipartisan organization that contributes to the campaigns of federal, state, and local candidates, MSPAC typically supports candidates who share Microsoft views on public policy, serve as congressional or legislative leaders, represent districts or states where Microsoft has a major business presence, or serve on committees that have jurisdiction over legislation that is important to the company.

“The MSPAC Steering Committee evaluates candidates’ public policy positions on issues that are relevant to Microsoft business or of particular interest to the computer software industry. The committee – composed of senior managers in Legal and Corporate Affairs at Microsoft – then decides which candidates and campaigns MSPAC will support.”

endogenous decision to give a particular amount in addition to the effect of the political giving. They also find that neither non-campaign-specific soft money political giving through independent expenditure committees nor charitable giving drives these results.

Additionally, Claessens *et al.* (2008) study Brazilian firms and find that political giving is associated with more access to financing. They attempt to alleviate endogeneity concerns by showing that political giving to presidential affiliates, incumbent and winning candidates have a greater impact. Unfortunately, the significant positive correlation between winning and losing candidates limits inferences. Likewise, Perez-Saiz and Semenov (2014) find that banks allocate capital to legislators who appoint regulators in advance of acquisitions, suggesting firms give to politically powerful legislators in advance of making acquisitions or that government officials allow firms giving politically to grow through the acquisition market. More recently, Brown *et al.* (2015) observe significantly lower and less volatile effective tax rates for firms giving politically, another example of opportunities for firms and shareholders to benefit from political engagement. However, in each case, similar endogeneity concerns persist. Overall, research on political giving observes positive correlations between firm benefits and political giving, similar to other literatures linking politics to corporate outcomes (Faccio 2006; Faccio *et al.* 2006; Faccio & Parsley 2009; Ovtchinnikov & Pantaleoni 2012; Yu & Yu 2012; Fang & Prabhat 2013; Hill *et al.* 2013a; Hill *et al.* 2013b; Chen *et al.* 2014). More importantly, the literature continues to struggle to resolve endogeneity concerns related to omitted variables and specification errors.

CHAPTER THREE

EMPIRICAL ANALYSIS

While the evidence associating positive corporate outcomes with larger political giving demonstrates a correlation, the causality of the relation is still unknown. Though researchers make efforts to account for endogeneity concerns, much of the evidence in the literature incorporates the effect of political giving on shareholder wealth as well as the endogenous factors correlated with the firm's decision to allocate that amount of capital to politicians. Using time-varying political giving around campaign finance reform to exploit exogenous variation in giving reduces the possibility that omitted variables are correlated with the variables of interest. While federal campaign finance laws governing corporate political activity have changed very little through time with the exception of the Bipartisan Campaign Reform Act (BCRA), state campaign finance laws exhibit substantive variation across both states and time. Thus, the changes in state-level restrictions implemented over the past few decades allow for a quasi-natural experiment on the importance of corporate involvement in the political process and, thus, can offer insight into the effects of campaign finance (Stratmann & Aparicio-Castillo 2006). I therefore exploit changes in state campaign finance reforms to identify the relation between corporate political giving and shareholder wealth. First, I summarize the data and show the correlation from prior literature. Then, I use a DiD approach to test whether campaign finance reforms affect corporate political giving and measure whether shareholder wealth responds to these externally imposed restrictions.

Corporate Political Giving and Firm Characteristics

To take advantage of state campaign finance reform, I employ the most comprehensive database of hard money corporate PAC giving to political campaigns for government offices at all levels to test the effect on shareholder wealth. To my knowledge, this study is the first to study hard money gifts to politicians running for all government offices from firms in the CRSP/Compustat universe using data from the National Institute on Money in State Politics and the FEC.⁹ The FEC provides data for political giving to campaigns for federal offices beginning in 1979, and the first available state political giving data are in 1975. In order to reduce effects attributable to the cyclical nature of elections and political giving, I compute the total from data over a full four-year election cycle such that giving to a politician elected every four years are incorporated throughout the term length, similar to Cooper et al. (2010).¹⁰ The sample begins in 1984, when the first full cycle of data are available, and ends in 2014, when the most recent election cycle ends. This period allows me to observe shareholder wealth for the four years before and after each reform, which span from 1988 to 2010.

In order to exploit the adoption of these state laws and test causality, I include state political giving data, which are essential to capture the variation in giving largely free of econometric concerns related to reverse causality, simultaneity bias, omitted variables and other specification errors. In order to identify firms giving to state politicians, I collect PAC data from the National Institute on Money in State Politics, in addition to the FEC. Since firms giving

⁹ Perez-Saiz and Semenov (2014) focus on state political giving and limit analysis to the importance of giving by financial institutions to state officials governing the financial services industry in advance of mergers and acquisitions. The remaining literature focuses on federal political giving.

¹⁰ My results are quantitatively and qualitatively similar when using the same five-year period as Cooper *et al.* (2010), as well as shorter and longer time periods.

politically decide how much to allocate to campaigns and frequently give the amount allowed by limits (and larger quantities when political giving is not restricted), restrictions on campaign finance implement binding constraints for some firms, resulting in exogenous variation in political giving for these firms.

I define state political giving as contributions made by firm-dedicated PACs to political campaigns governed by state agencies, including candidates running for both state and local offices, while federal political giving include all contributions governed by and disclosed to the FEC. I manually identify firms with dedicated PACs from each source. I merge the political giving data with the CRSP/Compustat universe. All of the analysis is completed at the firm-year observation level. I perform two sets of analyses that require multiple samples. First, I replicate the prior literature using the full CRSP/Compustat universe (full sample). The other sample (experiment sample) is used for the quasi-natural experiment created by campaign finance reforms and consists of treatment firms and matching control firms. I identify treatment firms as those headquartered in states passing campaign finance reforms imposing limits below the firm's previous political giving. Specifically, since each reform limits giving on a per campaign basis, I identify treatment firms using the maximum amount allocated to any campaign during the four-year election cycle prior to reforms.

The full sample is comprised of both firms that give to political candidate campaigns and firms that do not. Once I merge political giving data with financial and governance information, the final sample of all firms results in 95,878 firm-year observations pertaining to 31 years of data for 13,229 unique firms. Firms that do not give politically are separated from those that do give, and firms giving politically are further divided into three mutually exclusive categories:

firms giving to only state politicians, firms giving to state and federal politicians and firms giving to only federal politicians.¹¹ Firms that give politically account for approximately 30% of the sample, with more firms giving to state campaigns than federal. Firms giving to both state and federal politicians allocate approximately 50% of total giving to state politicians. Table I presents firm characteristics for firms by political giving. Firms giving to state and federal politicians are the largest, followed by firms giving to only federal, only state and not at all. In addition to giving more politically, firms giving to state and federal politicians also have more geographic segments, higher leverage, higher governance index and larger, more independent boards. Comparing the groups reveals the distinctions and importance of the DiD and fixed effects in subsequent analyses.

Despite campaign finance reform, the number of firms giving politically and the aggregate amounts given grow significantly from 1984 to 2014 in analyses results, especially for state political giving. While almost 20% of CRSP/Compustat firms gave politically in the 1980s (10% to federal and 10% to state politicians), nearly 30% gave politically in the 2000s (20% state and 10% federal). While campaign finance reform may have slowed the growth in political giving, state political giving and federal political giving have grown at average rates of 30% and 12% during the past few decades. Taken together, these patterns indicate firm decision-makers value state political ties highly relative to those with federal politicians.¹²

¹¹ The analysis is similar when groups are separated by firm-year, election cycle or the full period using the same categories, since political giving is persistent.

¹² Most legislative activity takes place at the state level. In 2012, for example, the United States Congress passed fewer bills than any state legislature in the country, with most state legislature passing twice as many bills as Congress. See e.g., LegiNation, Inc., which provides data for state legislature activity: <https://www.billtrack50.com/>.

Table I – Summary of Political Giving

In Table I, I present summary statistics for the CRSP-Compustat universe of firms from 1984 to 2014, grouped by political giving. Sample means for each group are presented with the number of unique firms and observation count listed above. Political giving is studied during four year cycles in order to reduce the cyclical nature of the data, similar to the methodology of Cooper *et al.* (2010). *Political Giving* is the sum of political giving by a given firm to all campaigns for any office during the prior four years ending with the election. *Giving Per Campaign* is the ratio of total political giving to the total number of campaigns to whom the firm gave politically during the prior four years ending with the election. *Republican* is the percentage of political giving allocated to Republican campaigns during the prior four years ending with the election. *Incumbent* is the percentage of political giving allocated to incumbent candidate campaigns during the election cycle. *Headquarter State* is the percentage of political giving allocated to campaigns in the firm's headquartered state during the prior four years ending with the election. *Market Value of Equity* is total level of market capitalization of the firm in millions of USD at the most recent fiscal year end prior to the election cycle, using the price at the most recent month ending prior to the fiscal year end. *Leverage* is the ratio of long-term debt to assets at the most recent fiscal year-end prior to the election cycle end. *Geographic Segments* is the count of geographic segments the firm has listed in Compustat during the most recent fiscal year end prior to the election cycle end. *Regulated Industry* is an indicator equal to one if a firm operates in the financial services industry (one-digit SIC code 6) or in the utilities industry (two-digit SIC code 49) and zero otherwise. *Prior 12-Month BHR* is the cumulative return over the prior year immediately preceding the fiscal year end prior to the election cycle end. All variable definitions are included in Appendix A.II. Differences compare the group to the left, with the first column comparing firms giving to state & federal campaigns to those giving to state campaigns. Significance at the 10%, 5% and 1% levels are indicated as *, ** and ***.

	State & Federal Political Giving	Federal Political Giving	State Political Giving	No Political Giving
	671 Firms	1,635 Firms	1,887 Firms	9,036 Firms
	(N=4,142)	(N=10,092)	(N=11,648)	(N=69,996)
Political Giving Characteristics				
<i>Political Giving</i>	458,164***	146,214***	73,859***	
<i>Giving Per Campaign</i>	1,594*	1,245***	1,653***	
<i>Republican (%)</i>	0.62***	0.62	0.58***	
<i>Incumbent (%)</i>	0.74***	0.77***	0.64***	
<i>Headquarter State (%)</i>	0.36***	0.24***	0.55***	
Financial Characteristics				
<i>Market Value of Equity</i>	20,548***	8,985***	3,772***	1,072***
<i>Leverage</i>	0.268*	0.257***	0.267***	0.210***
<i>Geographic Segments</i>	2.17***	1.84***	1.43***	1.53***
<i>Regulated Industries (%)</i>	0.19*	0.15***	0.22***	0.14***
<i>Prior 12-Month BHR</i>	0.044***	0.056*	0.098**	0.041***
<i>Post 12-Month BHR</i>	0.046*	0.043	0.064*	0.034**
Governance Characteristics				
<i>Governance Index</i>	9.87***	9.88*	9.13***	8.91**
<i>CEO Duality</i>	0.69***	0.65***	0.61***	0.54***
<i>Board Size</i>	11.16***	10.69***	9.99***	8.75***
<i>Independent (%)</i>	0.76***	0.74***	0.69***	0.69***

As much of the prior literature has documented that federal political giving is correlated with firm value, I begin the analysis by regressing Tobin's Q on measures of political giving and firm characteristics in Table II. Similar to Cooper *et al.* (2010), I also utilize the log of political giving measures. The positive coefficients for *Log (Political Giving)*, *Log (State Giving)* and *Log (Federal Giving)* indicate all are positively correlated (coefficients = 0.012, 0.020 and 0.009, respectively) with *Tobin's Q*, showing state political giving shares the positive correlation between federal political giving and firm value without controlling for endogeneity. State giving is also correlated with firm value beyond the correlation between state and federal giving by including both variables in column 4. Finally, column 5 shows state political giving is correlated with firm value even among federal givers. Panel B of Table II repeats the analysis including only firms giving politically, which shows a similar correlation. Though firm value is correlated with political giving, this analysis does not address endogeneity. As a result, I utilize the quasi-natural experiment created from externally imposed campaign finance reforms to infer causality.

Campaign Finance Reforms

While many states follow the model of federal campaign finance laws, state campaign finance reform varies significantly from state to state between 1984 and 2014. Twenty-two states impose twenty-six campaign finance reforms. Seventeen of these law changes limit previously unlimited political giving, leading to plausibly exogenous declines in political giving. The remaining law changes relax restrictions, allowing firms to choose a higher level of political giving. Since political giving decisions become endogenous to the firm after restrictions are relaxed, I focus on law changes imposing limits that restrict firms' political giving. These law

Table II – State and Federal Political Giving

Table II tabulates the multivariate analysis of shareholder wealth for firms to analyze the relation to corporate political giving. *Tobin's Q* is calculated as the ratio of total assets less book value of equity plus market value of equity from the most recent month ending prior to the fiscal year-end to total assets at the prior year-end following the end of the election cycle. *Log (Political Giving)* is the log of one plus the political giving to all campaigns during the election cycle. *Log (State Giving)* is the log of one plus the political giving to state campaigns during the election cycle. *Log (Federal Giving)* is the log of one plus the sum of political giving to federal campaigns during the election cycle. *Log (State Giving) * Federal* is the interaction of log of one plus the political giving to state campaigns during the election cycle with an indicator variable equal to one for firms giving to federal politicians and zero otherwise, such that the value is equal to the log of one plus state political giving for firms also giving to federal politicians and zero otherwise. *Return-on-Assets* is the ratio of net income to total assets at the most recent fiscal year end prior to the election cycle end. *Log (Total Assets)* is the total level of assets of the firm in millions of USD at the most recent fiscal year-end prior to the election cycle. *Intangible Ratio* is the level of intangible assets scaled by total assets of the firm at the most recent fiscal year end prior to the election cycle. *R&D-to-Sales* is the total level of research and development expenses scaled by the total level of sales for the firm at the most recent fiscal year end prior to the election cycle. *Leverage* is the ratio of long-term debt to assets at the most recent fiscal year-end prior to the election cycle end. *Inverse Mills Ratio* is computed using a predicted model for the likelihood of giving politically from Cooper, Gulen, and Ovtchinnikov (2010). All models include firm and year fixed effects. All variable definitions are included in Appendix A.II. Robust p-values are in parentheses, with standard errors clustered by firm. Significance at the 10%, 5%, and 1% levels are indicated as *, **, and ***.

Panel A: Multivariate Analysis of State Political Giving and Firm Value

VARIABLES	(1) <i>Tobin's Q</i>	(2) <i>Tobin's Q</i>	(3) <i>Tobin's Q</i>	(4) <i>Tobin's Q</i>	(5) <i>Tobin's Q</i>
<i>Log (Political Giving)</i>	0.012*** (0.002)				
<i>Log (State Giving)</i>		0.020*** (<0.001)		0.019*** (<0.001)	
<i>Log (Federal Giving)</i>			0.009** (0.050)	0.005 (0.337)	0.003 (0.573)
<i>Log (State Giving) * Federal</i>					0.022*** (<0.001)
<i>Log (Total Assets)</i>	-0.189*** (<0.001)	-0.194*** (<0.001)	-0.185*** (<0.001)	-0.196*** (<0.001)	-0.193*** (<0.001)
<i>Leverage</i>	-0.349*** (<0.001)	-0.348*** (<0.001)	-0.351*** (<0.001)	-0.347*** (<0.001)	-0.347*** (<0.001)
<i>Return-on-Assets</i>	-0.093 (0.283)	-0.089 (0.302)	-0.094 (0.274)	-0.089 (0.304)	-0.090 (0.299)
<i>Intangible Ratio</i>	-0.470*** (<0.001)	-0.476*** (<0.001)	-0.472*** (<0.001)	-0.477*** (<0.001)	-0.480*** (<0.001)
<i>R&D-to-Sales</i>	0.001*** (0.002)	0.001*** (0.002)	0.001*** (0.002)	0.001*** (0.002)	0.001*** (0.002)
Constant	2.842*** (<0.001)	2.879*** (<0.001)	2.827*** (<0.001)	2.882*** (<0.001)	2.872*** (<0.001)
Firm and Year Fixed Effects	Yes	Yes	Yes	Yes	Yes
Observations	95,878	95,878	95,878	95,878	95,878
Adjusted R-squared	0.493	0.493	0.493	0.493	0.493

Table II – State and Federal Political Giving (Continued)

<i>Panel B: Multivariate Analysis of State Political Giving and Firm Value among Firms Giving Politically</i>					
VARIABLES	(1) <i>Tobin's Q</i>	(2) <i>Tobin's Q</i>	(3) <i>Tobin's Q</i>	(4) <i>Tobin's Q</i>	(5) <i>Tobin's Q</i>
<i>Log (Political Giving)</i>	0.007* (0.053)				
<i>Log (State Giving)</i>		0.017*** (<0.001)		0.018*** (<0.001)	
<i>Log (Federal Giving)</i>			0.001 (0.842)	-0.002 (0.670)	-0.004 (0.404)
<i>Log (State Giving) * Federal</i>					0.0180*** (<0.001)
<i>Inverse Mills Ratio</i>	1.122*** (<0.001)	1.132*** (<0.001)	1.129*** (<0.001)	1.134*** (<0.001)	1.137*** (<0.001)
<i>Log (Total Assets)</i>	-0.385*** (<0.001)	-0.402*** (<0.001)	-0.376*** (<0.001)	-0.401*** (<0.001)	-0.393*** (<0.001)
<i>Leverage</i>	-0.535*** (<0.001)	-0.530*** (<0.001)	-0.538*** (<0.001)	-0.531*** (<0.001)	-0.528*** (<0.001)
<i>Return-on-Assets</i>	0.678*** (<0.001)	0.689*** (<0.001)	0.675*** (<0.001)	0.689*** (<0.001)	0.688*** (<0.001)
<i>Intangible Ratio</i>	-0.458*** (0.007)	-0.469*** (0.006)	-0.459*** (0.007)	-0.468*** (0.006)	-0.479*** (0.005)
<i>R&D-to-Sales</i>	0.003 (0.447)	0.003 (0.427)	0.003 (0.447)	0.003 (0.426)	0.003 (0.427)
Constant	4.962*** (<0.001)	5.088*** (<0.001)	4.934*** (<0.001)	5.087*** (<0.001)	5.048*** (<0.001)
Firm and Year Fixed Effects	Yes	Yes	Yes	Yes	Yes
Observations	25,882	25,882	25,882	25,882	25,882
Adjusted R-squared	0.083	0.086	0.083	0.086	0.085

changes take place between 1988 and 2010, with half of the reforms taking place by 1996, allowing time for exogenous variation in political giving following the law changes and subsequent changes in shareholder wealth. While laws are not randomly assigned, the impetus for each law differs. For example, some campaign finance reforms were enacted through voter initiatives in the 1990s (Stratmann & Aparicio-Castillo 2006).¹³ Though unlikely that firms giving politically are the motivating factor in reforms, I address this concern later in additional analyses. The most commonly imposed corporate political giving limit is \$5,000 from a firm to a political campaign during a four-year cycle. Though cost of living adjustments raise political giving, my analysis focuses on substantive law changes, imposing limits to previously unrestricted political giving. Limits influence the amounts firms give to politicians. Firms in states without political giving limits allocate over 100% more capital to politicians. Appendix A.I summarizes changes to political giving limit laws by state.

Since firms allocate 55% of political giving to campaigns in the state where the firm is headquartered and politicians in the headquarter state are most likely to impact firms, I identify firms located in states where campaign finance reforms limit previously unrestricted political giving. While other firms are located in those states, I find 97 firms affected by the reforms such that they previously gave more to a single political campaign than the subsequently enacted reform allows. As a result, the reforms lead to plausibly exogenous declines in giving for these

¹³ While California and Oregon also impose political giving limits in 1996, these law changes are not included in the analysis because they are overturned by judicial actions before an election cycle passes. These reforms do not alter my conclusions. Also, see e.g., Stratmann and Aparicio-Castillo (2006), who study the effects of changes in limits to political giving in elections and observe that winners have more competitive elections with smaller victory margins and more candidate campaigns once political giving limits take effect. They document that lower limits favor challengers, increasing competition.

97 treatment firms. I match treatment firms with firms from states that do not enact campaign finance reform such that my experiment sample includes treatment and control firms.

To identify control firms, I draw from firms in non-reform states, excluding firms in states where political giving limits increase. I require that firms share the first digit of the Standard Industrial Classification (SIC) code and year, in addition to being within 25% of *Market Value of Equity*, *Tobin's Q* and *Maximum Political Giving Per Headquarter State Campaign*. Of the 97 treatment firms, 86 have at least one corresponding control firm that meets these requirements. Further, I require each firm's match to have the necessary data to be included in the analysis, creating a balanced sample of treatment and control firms. Then, I select the control firm with total headquarter state political giving closest to the treatment firm to ensure that treatment and control firms have similar political giving and are matched on a one-to-one basis.¹⁴ Table III presents summary statistics comparing treatment and control firms. Treatment and control firms are characteristically indistinguishable during the year prior to reforms, including not having significantly different *Market Value of Equity* (p-value = 0.778), *Leverage* (0.528), *Return-on-Assets* (0.852), *Governance Index* (0.487), *Business Segments* (0.850), *Geographic Segments* (0.583), *Industry Adjusted Q* (0.964) and *Prior 12-Month BHAR* (0.203). This comparison suggests treatment and control assignment is "as-if" randomly assigned, facilitating an appropriate setting for a DiD testing approach.

¹⁴ These binding constraints help identify a large sample of similar control firms. In fact, 75% of control firms are within 5% of the *Market Value of Equity* of the corresponding treatment firm. Further, 80% share the first two digits of the SIC code and 65% share the first three digits. I only require that the treatment and control firm be in the sample for one year before and after the reforms to be included in the sample, but of the four years before and after the reforms, each pair is included for an average of 7.4 of the 8 possible years. The results are similar when requiring firms be present for the full period, share the first three digits of the SIC code and be within 5% of *Market Value of Equity*, though the sample size reduction affects the power to test significance in some tests. I have also performed tests with larger samples including less restrictive matching constraints and unmatched pooled analyses with similar results.

Table III – Summary of Firm Characteristics and Political Giving

Table III presents summary statistics for firms grouped by whether the firm is a treatment firm, giving above subsequently imposed political giving limits during the year prior to the reform in the firm's headquarter state. The groups provide a quasi-natural experiment. Each group includes 86 matching firms, with sample means for each group in addition to the p-value for the test comparing the sample means. Matching firms are required to share the first digit of the Standard Industrial Classification code industry and be within 25% of *Market Value of Equity*, *Tobin's Q* and *Maximum Political Giving Per Campaign* over the most recent four-year election cycle. Then, I select the firm closest in *Total Headquarter State Political Giving*, such that the match is one-to-one. *Market Value of Equity* is total level of market capitalization of the firm in millions of USD at the most recent fiscal year end prior to the election cycle, using the price at the most recent month ending prior to the fiscal year end. *Leverage* is the ratio of long-term debt to assets at the most recent fiscal year-end prior to the election cycle end. *Return-on-Assets* is the ratio of net income to total assets at the most recent fiscal year end prior to the election cycle end. *Intangible Assets* is the level of intangible assets scaled by total assets of the firm at the most recent fiscal year end prior to the election cycle. *Board Size* is a count of the board of directors at the firm at the most recent annual meeting prior to the election cycle end. *Insiders* is the number of the board of directors employed by the firm at the most recent annual meeting prior to the election cycle end. *Governance Index* is a measure of firm governance based upon provisions the firm holds at the most recent annual meeting date prior to the election cycle end, reported by Gompers, Ishii, and Metrick (2003), with higher numbers indicating less shareholder-friendly provisions in place or worse overall governance. *Business Segments* is the count of business segments the firm has listed in Compustat during the most recent fiscal year end prior to the election cycle end. *Geographic Segments* is the count of geographic segments the firm has listed in Compustat during the most recent fiscal year end prior to the election cycle end. *Industry Adjusted Q* is the ratio of total assets less book value of equity plus market value of equity at the month prior to the fiscal year end to total assets at the most recent fiscal year end prior to the election cycle end, less the median for the industry as defined by the first two digits of Standard Industrial Classification Code. *Prior 12-Month BHAR* is the cumulative return less the market return over the prior year immediately preceding the fiscal year end prior to the election cycle end. *Prior 36-Month BHAR* is the cumulative return less the market return over the prior three years immediately preceding the fiscal year end prior to the election cycle end. All variable definitions are included in Appendix A.II.

	Treatment	Control	P-Value of Difference
	86 Firms	86 Firms	86 Firm-Pairs
<i>Market Value of Equity</i>	6,994	7,919	0.778
<i>Leverage</i>	0.27	0.29	0.528
<i>Return-on-Assets</i>	0.01	0.02	0.852
<i>Intangible Ratio</i>	0.18	0.16	0.367
<i>Board Size</i>	10.00	9.42	0.204
<i>Board Insiders</i>	1.37	1.36	0.971
<i>Governance Index</i>	9.33	8.36	0.487
<i>Business Segments</i>	2.52	2.62	0.850
<i>Geographic Segments</i>	1.41	1.56	0.583
<i>Industry Adjusted Q</i>	0.16	0.16	0.964
<i>Prior 12-Month BHAR</i>	0.09	0.02	0.203
<i>Prior 36-Month BHAR</i>	0.13	0.10	0.825

To discern the impact of campaign finance reform on political giving and affirm that the constraint binds as expected, I analyze political giving before and after reforms for treatment and control firms. My univariate analysis serves as a traditional DiD approach. Specifically, since all reforms impose limits to political giving from each firm to each campaign, I focus on the maximum amount a firm gives any political campaign to identify when the new legally imposed constraint on political giving is binding.¹⁵ Table IV tabulates *Maximum Political Giving Per Headquarter State Campaign* in Panel A and *Total Headquarter State Political Giving* in Panel B for treatment and control firms (first difference) during the pre and post reform periods (second difference). I average observations during the four years (full election cycle) before and after the reforms, to alleviate potential econometric issues related to time dependence in the outcome variable within each firm (Bertrand *et al.* 2004). The results document a significant decline in *Maximum Political Giving Per Headquarter State Campaign* of approximately 65% for treatment firms following reforms, while control firms exhibit increases in political giving, similar to political giving trends for the broader sample period. The first and second differences suggest treatment firms exhibit similar political giving pre-reform but significantly lower political giving post reform. Moreover, the DiD p-value is below 1%. Similarly, *Total Headquarter State Political Giving* declines approximately 25% for treatment firms, while remaining unchanged for control firms. While the parallel changes assumption is not directly testable, my results in Table IV offer informal confirmation that the assumption is credible, showing treatment and control firms exhibit similarities and correlated political giving subject to

¹⁵ Political giving is highly persistent over time, so prior giving proxies for future giving in the absence of reforms. The first-order autocorrelation coefficient is 0.938, which has an F-statistic of 5.620, rejecting the null hypothesis of no first-order autocorrelation.

Table IV – Political Giving around Campaign Finance Reforms

Table IV summarizes political giving around campaign finance reforms for 86 treatment and control firms during the four-year election cycle before and after campaign finance reforms. Panel A shows maximum political giving allocated per campaign in the firm's headquarter state, while Panel B shows total political giving in the firm's headquarter state. Matching firms are required to share the first digit of the Standard Industrial Classification code industry and be within 25% of *Market Value of Equity*, *Tobin's Q* and *Maximum Political Giving Per Campaign* over the most recent four-year election cycle. Then, I select the firm closest in *Total Headquarter State Political Giving*, such that the match is one-to-one. To alleviate concerns over cyclical effects in political giving, I use four-year election cycle political giving measures. *Maximum Political Giving Per Headquarter State Campaign* is computed as the maximum of all political giving to each headquarter state campaign during the four-year election cycle before and after the law change. *Total Headquarter State Political Giving* is computed as the sum of all political giving to each headquarter state campaign during the four-year election cycle before and after the law change. All variable definitions are included in Appendix A.II. Significance at the 10%, 5% and 1% levels are indicated as *, ** and ***.

Panel A: Maximum Political Giving Per Headquarter State Campaign around Campaign Finance Reforms

	Pre	Post	Difference
Treatment	15,477	5,427	(10,050)***
Control	14,346	15,474	1,128***
Difference	1,131	(10,047)***	(11,178)***

Panel B: Total Headquarter State Political Giving around Campaign Finance Reforms

	Pre	Post	Difference
Treatment	47,780	35,359	(12,421)***
Control	40,680	41,020	340
Difference	7,099*	(10,047)**	(12,081)***

similar economic and legal forces.¹⁶ The decline in political giving for treatment firms following campaign finance reforms suggests the experimental setting is useful for understanding the impact on firms and shareholders when law changes externally impose shifts in political giving. Having demonstrated the importance of campaign finance reform on political giving, I study shareholder wealth around reforms to infer causality of political giving on corporate outcomes.

Univariate Analysis of Shareholder Wealth around Campaign Finance Reforms

My first attempt at identifying causal inference largely free of econometric concerns involves analyzing the univariate DiD between treatment and control firms between the pre and post reform periods. In Table V, I analyze firm value, measured by *Tobin's Q*, in Panel A and stock performance, measured by *12-Month Buy-and-Hold Return*, in Panel B. The second difference in both analyses is negative and significant, indicating that treatment firms decline in value and shareholders lose wealth following reforms, relative to control firms. The economic magnitude suggests firm value declines by over 10%, while buy-and-hold returns decrease by 16% in the post reform period relative to control firms. In both Panel A and B, the sign of the change from the pre to post reform period is positive for control firms and negative for treatment firms. Table V suggests that treatment firms decline in value relative to control firms, providing evidence that declines in political giving lead to lower shareholder wealth.

As an additional test, I examine the differential impact of the reforms on treatment firms where law changes should have a larger effect, i.e., firms with more concentrated political giving. I implement a DiDiD framework by comparing concentrated treatment firms to

¹⁶ Since multiple staggered shocks lead to concerns regarding parallel trends, I also employ an instrumental variable approach as robustness, which replaces the parallel trends assumption with the “only through” assumption. The results are similar, and conclusions unchanged.

Table V – Shareholder Wealth around Campaign Finance Reforms

Table V summarizes firm value and stock performance around campaign finance reforms for 86 treatment and control firms during the four-year election cycle before and after campaign finance reforms. Matching firms are required to share the first digit of the Standard Industrial Classification code industry and be within 25% of *Market Value of Equity*, *Tobin's Q* and *Maximum Political Giving Per Campaign* over the most recent four-year election cycle. Then, I select the firm closest in *Total Headquarter State Political Giving*, such that the match is one-to-one. Panels A and B present average firm value as measured by *Tobin's Q* and *12-Month Buy-and-Hold Return* during the four-year election cycle before and after reforms. I present means for the four annual observations before and after each law change, in addition to the differences between groups, pre and post law changes for each group and the difference-in-differences. *Tobin's Q* is computed as the ratio of total assets less book value of equity plus market value of equity at the month prior to the fiscal year end to total assets at the most recent fiscal year end prior to the end of the election cycle, such that the average of the four years before and after the campaign finance reform are included. *12-Month Buy-and-Hold Return* is the cumulative return over the prior year immediately preceding the fiscal year end prior to the election cycle end such that the average of the four years before and after the campaign finance reform are included. All variable definitions are included in Appendix A.II. Significance at the 10%, 5% and 1% levels are indicated as *, ** and ***.

Panel A: Firm Value Measured by Tobin's Q around Campaign Finance Reform

	Pre	Post	Difference
Treatment	1.61	1.52	(0.09)
Control	1.58	1.69	0.11**
Difference	0.03	(0.17)	(0.20)*

Panel B: Stock Performance Measured by Buy-and-Hold Return around Campaign Finance Reform

	Pre	Post	Difference
Treatment	0.25	0.12	(0.13)
Control	0.13	0.16	0.03
Difference	0.12**	(0.04)	(0.16)*

diversified treatment firms. Specifically, I measure concentration in two manners: headquarter state concentration and campaign concentration. Since the reforms take place in the state where the firms are headquartered, law changes should have a disproportionately greater effect on firms allocating a larger percentage of political giving to the headquarter state. Further, since reforms limit giving on a per campaign basis, firms concentrating political giving among a smaller number of candidates should also exhibit larger declines in shareholder wealth following reforms, since the political giving structure of those firms becomes constrained to a greater degree. I measure headquarter state concentration as the ratio of the firm's headquarter state political giving to giving in all state campaigns, which I analyze in Panels A (firm value) and C (stock performance). Similarly, in Panels B and D, I measure campaign concentration as the percentage of the firm's top campaign gift relative to all campaigns. In each case, I bifurcate the sample on the median and compare above and below median concentration. Table VI presents the results.

The DiDiD results are all negative with the economic magnitudes implying declines in shareholder wealth at least as large as those observed in Table V. Panels A and B reveal that firms with concentrated political giving in reform states exhibit relative declines compared to firms with more diversified political giving. Both the second and third differences are negative and statistically significant in each case. This decline suggests that firms more reliant upon the firm's headquarter state exhibit the strongest reaction to law changes in that state, while other similar firms do not exhibit the same decline. Treatment firms with geographically diversified political giving outperform concentrated treatment firms in reform states during the post reform period. Panel C and D also shows a similar relation for firms with concentrated and diverse

Table VI – Concentrated Political Giving around Campaign Finance Reforms

Table VI summarizes firm value and stock performance around campaign finance reforms for treatment and control firms grouped by concentration. Using the concentration of treatment firm political giving, I divide the sample in half to identify firms more vulnerable to reforms. I measure concentration with two measures: headquarter state and campaign concentration. *Headquarter State Concentration* is the ratio of political giving to campaigns in the firm's headquarter state to political giving to all state campaigns. *Campaign Concentration* is the ratio of political giving to the campaign where the firm gives the most to the total political giving to all campaigns. Panels A and C use *Headquarter State Concentration*, while Panels B and D use *Campaign Concentration*. Panels A and B measure firm value using *Tobin's Q*, while Panels C and D utilize *Buy-and-Hold Return*. *Tobin's Q* is computed as the ratio of total assets less book value of equity plus market value of equity at the month prior to the fiscal year end to total assets at the most recent fiscal year end prior to the end of the election cycle, such that the average of the four years before and after the campaign finance reform are included. *12-Month BHR* is the cumulative return over the prior year immediately preceding the fiscal year end prior to the election cycle end such that the average of the four years before and after the campaign finance reform are included. All variable definitions are included in Appendix A.II. I present means for the four annual observations before and after each law change, in addition to the differences between groups, pre and post law changes for each group and the difference-in-differences. Significance at the 10%, 5% and 1% levels are indicated as *, ** and ***.

Panel A: Firm Value Measured by Tobin's Q by Headquarter State Concentration

	Concentrated		Diversified		Difference		
	Pre	Post	Pre	Post	Pre	Post	Difference
Treatment	1.53	1.14	1.69	1.91	-0.16	-0.77*	-0.61*
Control	1.54	1.83	1.62	1.55	-0.08	0.28	0.36
Difference	-0.01	-0.70*	0.07	0.36	-0.08	-1.05***	-0.97***

Panel B: Firm Value Measured by Tobin's Q by Campaign Concentration

	Concentrated		Diversified		Difference		
	Pre	Post	Pre	Post	Pre	Post	Difference
Treatment	2.06	1.54	1.16	1.51	0.90	0.03	-0.87**
Control	1.05	1.23	2.11	2.15	-1.06	-0.92	0.14
Difference	1.01**	0.31	-0.95**	-0.65*	1.96***	0.95**	-1.01**

Panel C: Stock Performance Measured by Buy-and-Hold Return by Headquarter State Concentration

	Concentrated		Diversified		Difference		
	Pre	Post	Pre	Post	Pre	Post	Difference
Treatment	0.34	0.20	0.17	0.05	0.17	0.15	-0.02
Control	0.11	0.20	0.15	0.12	-0.04	0.08	0.12
Difference	0.23*	-0.01	0.02	-0.08	0.21*	0.07	-0.14*

Panel D: Stock Performance Measured by Buy-and-Hold Return by Campaign Concentration

	Concentrated		Diversified		Difference		
	Pre	Post	Pre	Post	Pre	Post	Difference
Treatment	0.22	0.18	0.28	0.06	-0.06	0.12	0.18
Control	0.10	0.29	0.17	0.04	-0.07	0.25	0.32*
Difference	0.13	-0.11	0.12	0.03	0.01	-0.13	-0.14*

political giving among campaigns. These results also provide additional evidence that the differences observed around reforms relate specifically to changes in campaign finance activity. Having established evidence of a univariate relation between shareholder wealth and political giving reductions around reforms, I perform a multivariate DiD and DiDiD analysis of political giving shocks.

Multivariate Analysis of Political Giving and Shareholder Wealth around Reforms

I implement the DiD approach in a multivariate setting to control for additional firm characteristics and unobservable fixed effects. I regress shareholder wealth, measured by *Tobin's Q* and *BHAR12*, on *Treatment*, *Post*, and *Treatment * Post*. *Post* is an indicator variable equal to one following campaign finance reform, and *Treatment* is an indicator variable equal to one for firms in states enacting reforms whose maximum political gift in the election cycle prior to the reform exceeded the reform limit. The primary variable of interest is *Treatment * Post*, which identifies the group of firms previously giving more politically than the newly imposed reform allows after the reform takes effect. Table VII presents the results. Columns 1 and 2 present results for *Tobin's Q*, while columns 3 and 4 present results for *BHAR12*. Column 1 shows treatment and control firms do not have significantly different firm value overall, consistent with the value being similar prior to reforms. Column 2 shows that firm value is significantly lower for treatment firms following reforms (coefficient = -0.154; p-value = 0.096). Columns 3 and 4 present similar results, with the coefficient of *Treatment * Post* also being negative (-0.085) and significant (0.066). The economic magnitudes suggest that shareholder wealth declines approximately 9% for each measure. The results support firms' claims that political giving leads to greater shareholder wealth. Shareholder wealth decreases after limiting reforms for firms that

Table VII – Shareholder Wealth and Political Giving around Campaign Finance Reforms

Table VII analyzes shareholder wealth for treatment and control firms around campaign finance reforms. *Treatment* is an indicator variable equal to one for firms allocating at least the subsequently imposed political giving limit to any political campaign in the firm's headquarter state during the election cycle prior to campaign finance reform and zero otherwise. *Post* is an indicator variable equal to one following campaign finance reforms and zero otherwise. *Treatment * Post* is an indicator variable equal to one for treatment firms after campaign finance reforms and zero otherwise. *Size* is the log of the total market capitalization of the firm in millions of USD at the election cycle end. *Book-to-Market* is computed as the ratio of book value of equity at the most recent fiscal year end prior to the end of the election cycle to the market value of equity at the month prior to the fiscal year end prior to the end of the election cycle. *Market* is the cumulative return on the market over the prior year immediately preceding the fiscal year end prior to the election cycle end. *Momentum* is the cumulative return over the prior year immediately preceding the fiscal year end prior to the election cycle end. All models include state, industry and year fixed effects. Industry definitions utilize two-digit Standard Industrial Classification code. All variable definitions are included in Appendix A.II. Robust p-values are presented in parentheses. Significance is indicated at the 1%, 5% and 10% thresholds as ***, ** and *, respectively.

VARIABLES	(1) <i>Tobin's Q</i>	(2) <i>Tobin's Q</i>	(3) <i>BHAR12</i>	(4) <i>BHAR12</i>
<i>Treatment</i>	0.0637 (0.708)	0.0244 (0.882)	0.0486 (0.214)	0.0248 (0.563)
<i>Post</i>		0.002 (0.976)		0.0458 (0.187)
<i>Treatment * Post</i>		-0.154* (0.096)		-0.085* (0.066)
<i>Log (Total Assets)</i>	-0.066 (0.247)	-0.067 (0.245)		
<i>Return-on-Assets</i>	-0.394 (0.638)	-0.414 (0.615)		
<i>Intangible Ratio</i>	0.756** (0.033)	0.732** (0.042)		
<i>R&D-to-Sales</i>	0.003 (0.711)	0.002 (0.761)		
<i>Business Segments</i>	-0.049** (0.048)	-0.054** (0.035)		
<i>Geographic Segments</i>	0.061** (0.021)	0.064** (0.019)		
<i>Size</i>			-0.027* (0.080)	-0.028* (0.081)
<i>Book-to-Market</i>			-0.018 (0.839)	-0.017 (0.847)
<i>Market</i>			-0.077 (0.412)	-0.0812 (0.387)
<i>Momentum</i>			0.006 (0.875)	0.004 (0.911)
Constant	1.634*** (<0.001)	1.541*** (<0.001)	0.026* (0.088)	0.028* (0.080)
State, Industry and Year Fixed Effects	Yes	Yes	Yes	Yes
Observations	1,272	1,272	1,272	1,272
Adjusted R-Squared	0.082	0.086	0.028	0.021

previously allocated political giving above the subsequently imposed limit (i.e., firms legally forced to reduce political giving) but does not for otherwise similar control firms maintaining similar political giving.

Next, I implement the DiDiD in a multivariate setting. I add two indicator variables to measure concentration: *High Headquarter Concentration* and *High Campaign Concentration*. The primary variables of interest are *Treat * Post * High Headquarter* and *Treat * Post * High Campaign*, respectively. Table VIII presents the results, which document that firms giving politically in a concentrated manner exhibit significantly lower shareholder wealth following reforms, relative to otherwise similar control firms and non-concentrated treatment firms. The economic magnitude of the results demonstrates that shareholders of concentrated treatment firms exhibit the largest decline in wealth. Each model has a significant (p-values = 0.003, 0.060, 0.019, 0.028, respectively) and negative coefficient, with each model suggesting the decline exceeds 9%.

Government Awarded Contractual Subsidies

Finally, to provide insight into a potential channel through which political giving impacts shareholder wealth, I analyze subsidy contracts awarded to firms by state governments. One of the primary manners in which the literature discusses firm benefits from involvement with the political process is through preferential treatment by government decision-makers (Faccio *et al.* 2006; Claessens *et al.* 2008; Yu & Yu 2012; Chen *et al.* 2014). The most direct manner in which a government transfers capital to a corporation is through large government contract awards. If government contracts are valuable, then firms giving politically could increase shareholder wealth by obtaining additional contracts that offer supplementary revenue and profit.

Table VIII – Concentrated Giving and Shareholder Wealth around Reforms

Table VIII summarizes shareholder wealth around campaign finance reforms for firms by political giving concentration. Using the concentration of treatment firm political giving, I divide the sample in half to identify firms more vulnerable to reforms. I measure concentration with two measures: headquarter state and campaign concentration. *High Headquarter Concentration* is an indicator variable equal to one if the ratio of political giving to campaigns in the firm's headquarter state to political giving to all state campaigns is above the sample median and zero otherwise. *High Campaign Concentration* is an indicator variable equal to one if the ratio of political giving to the campaign where the firm gives the most to the total political giving to all campaigns is above the sample median and zero otherwise. Control variables for columns 1 and 2 include *Log (Total Assets)*, *Return-on-Assets*, *Intangible Ratio*, *R&D-to-Sales*, *Business Segments* and *Geographic Segments*, while control variables included in columns 3 and 4 are *Size*, *Book-to-Market*, *Market* and *Momentum*. All models include state, industry and year fixed effects. Industry definitions utilize two-digit Standard Industrial Classification code. All variable definitions are included in Appendix A.II. Significance at the 10%, 5% and 1% levels are indicated as *, ** and ***.

Table VIII – Concentrated Giving and Shareholder Wealth around Reforms (Continued)

VARIABLES	(1) <i>Tobin's Q</i>	(2) <i>Tobin's Q</i>	(3) <i>BHAR12</i>	(4) <i>BHAR12</i>
<i>Treatment</i>	-0.645*** (<0.001)	0.541** (0.017)	0.025 (0.795)	0.140* (0.078)
<i>Post</i>	-0.182** (0.038)	-0.011 (0.928)	0.081 (0.323)	0.043 (0.284)
<i>Treatment * Post</i>	0.899** (0.035)	-0.050 (0.899)	0.017 (0.887)	0.139 (0.250)
<i>High Headquarter Concentration</i>	-0.090 (0.222)		0.089 (0.175)	
<i>High Campaign Concentration</i>		0.356 (0.298)		0.056 (0.589)
<i>Treat * High Headquarter</i>	-0.166 (0.402)		0.017 (0.633)	
<i>Post * High Headquarter</i>	0.353*** (0.003)		0.022 (0.464)	
<i>Treat * Post * High Headquarter</i>	-0.682*** (0.003)		-0.0980** (0.019)	
<i>Treat * High Campaign</i>		-0.449 (0.284)		0.027 (0.826)
<i>Post * High Campaign</i>		0.232 (0.498)		-0.050 (0.626)
<i>Treat * Post * High Campaign</i>		-0.747* (0.060)		-0.285** (0.028)
<i>Log (Total Assets)</i>	-0.004 (0.885)	-0.068 (0.299)		
<i>Return-on-Assets</i>	0.855 (0.189)	-0.666 (0.450)		
<i>Intangible Ratio</i>	0.624* (0.071)	0.895** (0.021)		
<i>R&D-to-Sales</i>	1.968** (0.0358)	0.001 (0.907)		
<i>Business Segments</i>	-0.051* (0.070)	-0.068** (0.016)		
<i>Geographic Segments</i>	0.022 (0.414)	0.049** (0.049)		
<i>Size</i>			-0.050* (0.064)	-0.035* (0.076)
<i>Book-to-Market</i>			0.100 (0.346)	-0.056 (0.551)
<i>Market</i>			-0.217 (0.144)	-0.116 (0.246)
<i>Momentum</i>			-0.055 (0.115)	-0.007 (0.845)
Constant	1.587*** (<0.001)	1.079*** (<0.001)	0.042* (0.081)	0.033* (0.080)
State, Industry and Year Fixed Effects	Yes	Yes	Yes	Yes
Observations	1,272	1,272	1,272	1,272
Pseudo R-Squared	0.271	0.064	0.032	0.017

I analyze determinants of state government contract awards to study the relation to political giving. To examine government contracts, I collect data from Good Jobs First, a national policy resource center tracking the largest economic development subsidy packages awarded by state and local governments.¹⁷ While less than 1% of firms in the sample receive government subsidies, the average subsidy value in my sample is \$200 million dollars, which is likely to be the most direct mechanism for governments to affect shareholder wealth. Table IX examines political giving to government subsidies for the full sample, while Table X implements the DiD approach for subsidies. Though the methodology suffers from endogeneity concerns, Table IX shows firms giving politically, especially those allocating more money to state politicians, also receive more frequent and larger state contracts. Column 1 documents that *Log (State Giving)* is positively (coefficient = 0.0003) and significantly (p-value < 0.001) related to the probability of being awarded a government subsidy. Column 2 shows a similar result using an indicator variable, *State Political*, equal to one if the firm gives to state politicians and zero otherwise. Firms giving politically are 25% more likely to be awarded government contracts if they give politically.¹⁸ Further, column 3 shows that firms giving more politically are also awarded larger contracts, while column 4 shows firms giving politically are awarded 2% larger contracts. Since these relations may suffer from endogeneity, I perform a DiD analysis with respect to subsidies.

¹⁷ See e.g., Good Jobs First's Subsidy Tracker: <http://www.goodjobsfirst.org/megadeals/subsidy-tracker>.

¹⁸ I compute the conditional change in the probability by dividing the relative increase in conditional probability by the overall probability of contract awards in the sample: ((coefficient of *State Political*) / (Probability of Subsidy Award)) = 0.001 / 0.004.

Table IX – Political Giving and Government Subsidies

Table IX tabulates the multivariate analysis of state government subsidy awards and corporate political giving. *Log (State Giving)* is the log of one plus the political giving to state campaigns during the election cycle. *State Political* is indicator variable equal to one if the firm allocates capital to political giving to state campaigns during the election cycle and zero otherwise. *Log (Subsidy)* is the log of one plus the value of a subsidy value from a state or local government awarded to the firm during the following year. *Subsidy* is an indicator variable equal to one if the firm receives a subsidy from a state or local government the following year and zero otherwise. *Return-on-Assets* is the ratio of net income to total assets at the most recent fiscal year end prior to the election cycle end. *Log (Total Assets)* is the total level of assets of the firm in millions of USD at the most recent fiscal year-end prior to the election cycle. *Intangible Ratio* is the level of intangible assets scaled by total assets of the firm at the most recent fiscal year end prior to the election cycle. *R&D-to-Sales* is the total level of research and development expenses scaled by the total level of sales for the firm at the most recent fiscal year end prior to the election cycle. *Leverage* is the ratio of long-term debt to assets at the most recent fiscal year-end prior to the election cycle end. All variable definitions are included in Appendix A.II. All models include state, industry and year fixed effects. Industry definitions utilize two-digit Standard Industrial Classification code. Robust p-values are in parentheses, with standard errors clustered at the firm level. Significance at the 10%, 5%, and 1% levels are indicated as *, **, and ***.

VARIABLES	(1) <i>Subsidy</i>	(2) <i>Subsidy</i>	(3) <i>Log (Subsidy)</i>	(4) <i>Log (Subsidy)</i>
<i>Log (State Giving)</i>	0.0003*** (<0.001)		0.007*** (<0.001)	
<i>State Political</i>		0.001*** (0.009)		0.020*** (0.007)
<i>Log (Total Assets)</i>	0.0004*** (<0.001)	0.001*** (<0.001)	0.009*** (<0.001)	0.011*** (<0.001)
<i>Leverage</i>	-0.0009* (0.084)	-0.001* (0.090)	-0.018* (0.070)	-0.017* (0.075)
<i>Return-on-Assets</i>	-0.001*** (0.00102)	-0.001*** (<0.001)	-0.018*** (<0.001)	-0.020*** (<0.001)
<i>Intangible Ratio</i>	-0.001* (0.055)	-0.001* (0.056)	-0.024* (0.053)	-0.024* (0.054)
<i>R&D-to-Sales</i>	-126.5 (0.265)	-141.6 (0.266)	-0.00001 (0.264)	-0.00001 (0.265)
Constant	-0.002*** (<0.001)	-0.002*** (<0.001)	-0.037*** (<0.001)	-0.045*** (<0.001)
State, Industry and Year Fixed Effects	Yes	Yes	Yes	Yes
Observations	95,878	95,878	95,878	95,878
Adjusted/Pseudo R-squared	0.286	0.259	0.287	0.277

Table X – Political Giving and Government Subsidies around Campaign Finance Reforms

Table X tabulates the multivariate analysis of state government subsidy awards and corporate political giving around reforms. *Log (Subsidy)* is the log of one plus the value of a subsidy value from a state or local government awarded to the firm during the following year. *Subsidy* is an indicator variable equal to one if the firm receives a subsidy from a state or local government the following year and zero otherwise. Using the concentration of treatment firm political giving, I divide the sample in half to identify firms more vulnerable to reforms. I measure concentration with two measures: headquarter state and campaign concentration. All models include state, industry and year fixed effects. Industry definitions utilize two-digit Standard Industrial Classification code. All variable definitions are included in Appendix A.II. All models include state, industry and year fixed effects. Industry definitions utilize two-digit Standard Industrial Classification code. Robust p-values are in parentheses, with standard errors clustered at the firm level. Significance at the 10%, 5%, and 1% levels are indicated as *, **, and ***.

VARIABLES	(1) <i>Subsidy</i>	(2) <i>Log</i>	(3) <i>Subsidy</i>	(4) <i>Log</i>	(5) <i>Subsidy</i>	(6) <i>Log</i>
<i>Treatment</i>	-0.004 (0.543)	-0.076 (0.508)	-0.011 (0.204)	-0.220 (0.199)	-0.035 (0.149)	-0.731 (0.126)
<i>Post</i>	-0.001 (0.721)	-0.023 (0.771)	-0.006 (0.210)	-0.113 (0.193)	-0.014 (0.188)	-0.299 (0.163)
<i>Treatment * Post</i>	-0.010 (0.323)	-0.192 (0.317)	0.012 (0.386)	0.235 (0.375)	0.026 (0.597)	0.529 (0.579)
<i>High Headquarter Concentration</i>			0.040*** (<0.001)	0.824*** (<0.001)		
<i>High Campaign Concentration</i>			-0.034** (0.010)	-0.721*** (0.006)		
<i>Treat * High Headquarter</i>			0.037*** (<0.001)	0.785*** (<0.001)		
<i>Post * High Headquarter</i>			-0.044*** (<0.001)	-0.918*** (<0.001)		
<i>Treat * Post * High Headquarter</i>					0.012 (0.231)	0.240 (0.215)
<i>Treat * High Campaign</i>					-0.002 (0.933)	-0.052 (0.911)
<i>Post * High Campaign</i>					0.039** (0.012)	0.832*** (0.007)
<i>Treat * Post * High Campaign</i>					-0.046* (0.093)	-0.973* (0.074)
<i>Log (Total Assets)</i>	0.003** (0.034)	0.070** (0.030)	0.003* (0.064)	0.062* (0.056)	0.005* (0.099)	0.107* (0.089)
<i>Leverage</i>	0.008 (0.634)	0.170 (0.627)	0.010 (0.575)	0.200 (0.566)	0.019 (0.520)	0.372 (0.521)
<i>Return-on-Assets</i>	-0.008 (0.616)	-0.191 (0.568)	-0.005 (0.790)	-0.109 (0.744)	0.0001 (0.996)	-0.0507 (0.932)
<i>Intangible Ratio</i>	0.0003 (0.626)	0.006 (0.624)	0.0003 (0.635)	0.005 (0.635)	0.009 (0.910)	0.193 (0.904)
<i>R&D-to-Sales</i>	0.0002 (0.851)	0.001 (0.960)	-0.0003 (0.824)	-0.009 (0.694)	-0.001 (0.645)	-0.025 (0.519)
Constant	-0.026 (0.729)	-0.506 (0.729)	-0.0207 (0.778)	-0.435 (0.765)	-0.022 (0.825)	-0.443 (0.824)
State, Industry and Year Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes
Observations	1,272	1,272	1,272	1,272	1,272	1,272
Adjusted/Pseudo R-squared	0.055	0.054	0.071	0.071	0.104	0.104

Columns 1 and 2 of Table X show that the coefficient of *Treatment * Post* is negatively (though not statistically significantly) related to the likelihood and size of subsidy awards. In columns 3 through 6, I implement the DiDiD approach and observe that treatment firms giving politically in a concentrated manner observe significant declines in the likelihood and size of subsidy awards. The coefficients on the variables of interest are negative (-0.044, -0.918, -0.046, -0.973, respectively) and significant (p-values <0.001, <0.001, 0.093, 0.074, respectively). The decline in likelihood and size of subsidies for concentrated treatment firms following reforms, as well as the positive relation between political giving and subsidies, provides causal inference for the channel through which firms benefit from participating in the political process.

Additional Analysis of Political Giving and Shareholder Wealth

To offer additional evidence on the robustness of a causal relation between political giving and shareholder wealth, I use an alternative research design: shock based IV approach (Bowen *et al.* 2014). Since exogenous shocks often provide useful instruments, I also employ an IV approach by following a growing strand of the finance literature (Adams & Santos 2006; Black *et al.* 2006; Bennedsen *et al.* 2007; Guner *et al.* 2008; Iliev 2010). Consistent with my prior results, I relate political giving to the reform period and observe a negative relation in untabulated results. I also analyze the relation between the predicted variation in political giving and shareholder wealth in order to capture the exogenous change in political giving following campaign finance reform. In this setting, law changes meet the necessary instrument validity requirements by offering a significant effect on political giving, being largely randomly assigned and only impacting shareholder wealth through political giving (Angrist & Pischke 2008). I

observe a negative relation between *Post* and political giving, as well as a positive relation between the fitted value of political giving and shareholder wealth.

One concern with my research approach is that reforms need to be exogenous events. While campaign finance reforms have been used as exogenous shocks to elections in the political science literature, a possible concern is whether reforms are exogenous to firms, especially those giving politically. In untabulated analyses, I examine this by performing Weibull hazard models, where the “failure events” are the adoption of a political giving limit reduction. I find that reforms are not significantly related to information about the political economy, including the number or size of firms in the state, income per capita and political giving by firms overall or to either political party. I find no evidence that firms or states allocating a disproportionate share of giving to any particular party is a significant predictor of reforms, despite the fact that reforms are commonly associated with progressive politicians (Stratmann & Aparicio-Castillo 2006). My results suggest firms giving politically have little discretion over reforms, indicating campaign finance reforms are exogenous to the treatment firms of my quasi-natural experiment. Further, reforms are difficult for firms to predict and respond to in advance, suggesting they are also unexpected shocks. Therefore, the exogenous shocks provided by campaign finance reforms offer the most direct basis for causal inference to date for the effect of political giving on shareholder wealth.

To address other concerns that the states where the laws take place may differ from other states, I perform additional untabulated analyses. While state fixed effects likely take into account many unobservable factors, I perform additional analysis using a matched set of control firms within the reform states. I perform analysis with only in-state control firms, as well as

adding these control firms to my prior methodology. Further, I perform analyses where I pool all firms to include all possible firms to control for any potential difference in groups of firms or states. My results are similar in all cases, and the main conclusions remain unchanged. The results are also similar when analyzing differences between treatment and control firms rather than taking the differences from the average levels of each. I also perform analyses where I require that the firms only give to politicians within the reform state. While the sample is limited, the results are qualitatively similar. I also find similar results when using propensity score matching to identify control firms. Due to the Bipartisan Campaign Reform Act of 2002, I also perform subsample analyses before 2010 and observe similar results. Unfortunately, between the BCRA of 2002 and 2010 ruling by the Supreme Court of the United States in the case between Citizens United and the FEC, no state campaign finance reforms were enacted, largely due to states waiting on the court system to process the federal reforms. Additionally, due to the unique nature of the state-level data, I am able to observe whether political giving was allocated to winning campaigns. As a result, I perform analysis focused specifically on these funds and observe similar results on the subset of firms allocating capital to politicians winning elections.

Finally, while the number of reforms removing restrictions on political giving limits is small, I perform additional robustness tests on these law changes. In a couple of instances, states enact campaign finance reforms limiting political giving and subsequently pass laws removing those restrictions. In those cases, firms forced to reduce political giving exhibit positive changes in shareholder wealth following the removal of the restrictions providing further support for political giving increasing shareholder wealth and suggesting campaign finance reform can

increase or decrease shareholder wealth depending on the restrictions imposed or removed by reforms.

CHAPTER FOUR

CONCLUSION

Several studies on corporate involvement in politics have associated positive shareholder wealth effects with political influence. In fact, the return on investment suggested by some studies implies that corporations are significantly underinvesting in political influence. However, a causal link between corporate outcomes and participation in the political process is unclear. I provide the most comprehensive study of corporate political giving and shareholder wealth to date by introducing an innovative dataset, which allows me to exploit the staggered adoption of U.S. state laws to examine the effect of corporate political giving on shareholder wealth largely free of econometric concerns related to reverse causality, omitted variables, simultaneity bias, heterogeneous effects or measurement and other specification errors.

The empirical evidence indicates firms giving politically benefit from greater shareholder wealth, and one channel for increased wealth is in the form of additional government awarded subsidy contracts. I observe shareholder wealth declines following exogenous reductions in political giving resulting from campaign finance reforms, relative to otherwise similar but unaffected control firms. Importantly, the results show treatment firms reduce political giving and only firms reducing political giving exhibit negative changes to shareholder wealth. My empirical evidence helps measure firm benefits from political ties, suggesting the economic magnitude is noteworthy. Additionally, the results suggest corporate political givers are benefiting from their particular giving strategy and that reforms can force firms to alter political

participation to the detriment of shareholders. Overall, my results document shareholder benefits from corporate engagement in politics.

My study contributes to the literature on political links by informing the campaign finance landscape and providing the most credible basis for causal inference to date. I also contribute to the literature developing in financial economics that employs exogenous shocks to offer further scrutiny to econometric concerns. My findings suggest campaign finance reform plays an important role for corporate participants. The empirical evidence also informs the debate around campaign finance reforms, showing restrictions can negatively impact firms headquartered within the reform state and their shareholders. Policy makers should consider what value, if any, is created from restricting corporate participation in the political process and whether it exceeds the value destroyed. Public policy makers should be thoughtful of the structures of reforms, which are critical in determining which firms are most likely to be impacted by the law changes.

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APPENDIX

Table A.I Summary of Campaign Finance Reform

State	Political Giving Limit Law Change	Year of Laws Passed
Alabama	Always Unlimited	
Alaska	Always Limited	
Arizona	Always Limited	
Arkansas	Becomes Unlimited	1998
California	Becomes Limited Then Unlimited	1996; 1998
Colorado	Becomes Unlimited	1998
Connecticut	Always Limited	
Delaware	Always Limited	
Florida	Always Limited	
Georgia	Becomes Limited	1998
Hawaii	Always Limited	
Idaho	Becomes Limited	1998
Illinois	Becomes Limited	2011
Indiana	Always Unlimited	
Iowa	Always Unlimited	
Kansas	Always Limited	
Kentucky	Becomes Limited	1988
Louisiana	Becomes Limited	1988
Maine	Always Limited	
Maryland	Becomes Limited	1992
Massachusetts	Becomes Limited	1994
Michigan	Always Limited	
Minnesota	Always Limited	
Mississippi	Always Limited	
Missouri	Becomes Limited Then Unlimited	1996; 2000
Montana	Always Limited	
Nebraska	Always Limited	
Nevada	Becomes Limited	1992
New Hampshire	Becomes Unlimited Then Limited	1986; 2000
New Jersey	Always Limited	
New Mexico	Becomes Limited	2010
New York	Becomes Limited	1994
North Carolina	Always Limited	
North Dakota	Always Unlimited	
Ohio	Becomes Limited	1996

Table A.I Summary of Campaign Finance Reform (Continued)

State	Political Giving Limit Law Change	Year of Laws Passed
Oklahoma	Always Limited	
Oregon	Becomes Limited Then Unlimited	1996; 1998
Pennsylvania	Always Limited	
Rhode Island	Becomes Limited	1990
South Carolina	Becomes Limited	1992
South Dakota	Always Limited	
Tennessee	Becomes Limited	1996
Texas	Always Unlimited	
Utah	Always Unlimited	
Vermont	Becomes Unlimited	2004
Virginia	Always Unlimited	
Washington	Becomes Limited	1994
West Virginia	Always Limited	
Wisconsin	Always Limited	
Wyoming	Always Unlimited	

Table A.II Variable Definitions

Variable	Measurement	Data Source
Board Insiders	A count of the board of directors at the firm employed by the firm at the most recent annual meeting prior to the election cycle end	RiskMetrics
Board Size	A count of the board of directors at the firm at the most recent annual meeting prior to the election cycle end	RiskMetrics
Book-to-Market	The ratio of book value of equity at the most recent fiscal year end prior to the election cycle end to market value of equity at the month prior to the fiscal year end	Compustat Annual
Business Segments	The count of business segments the firm has listed in Compustat during the most recent fiscal year end prior to the election cycle end	Compustat Annual
Federal Political Giving	The sum of federal political giving made by a given firm over the prior four year election cycle	Federal Election Commission
Federal	Binary equal to one where the firm gives politically to federal political campaigns and zero otherwise	Federal Election Commission
Geographic Segments	The count of geographic segments the firm has listed in Compustat during the most recent fiscal year end prior to the election cycle end	Compustat Annual
Governance Index	A measure of firm governance based upon provisions the firm holds at the most recent annual meeting date prior to the election cycle end, reported by Gompers, Ishii, and Metrick (2003), with higher numbers indicating less shareholder-friendly provisions in place or worse overall governance	RiskMetrics
High Headquarter Concentration	Binary equal to one where the firm allocates more capital to the firm's headquarter state than the median treatment firm over the prior four year election cycle and zero otherwise	National Institute on Money in State Politics, Compustat Annual
High Campaign Concentration	Binary equal to one where the firm allocates more capital to the campaign where the firm gives the most than the median treatment firm over the prior four year election cycle and zero otherwise	National Institute on Money in State Politics, Compustat Annual
Headquarter State (%)	The percentage of the firm's total political giving allocated to campaigns for government offices in the state where the firm is headquartered during the election cycle	National Institute on Money in State Politics, Compustat Annual

Table A.II Variable Definitions (Continued)

Variable	Measurement	Data Source
Incumbent (%)	The percentage of the firm's total political giving allocated to incumbent candidate campaigns during the election cycle	National Institute on Money in State Politics, Compustat Annual
Industry Adjusted Q	The ratio of total assets less book value of equity plus market value of equity at the month prior to the fiscal year end to total assets at the most recent fiscal year end prior to the election cycle end, less the median for the industry as defined by the first two digits of Standard Industrial Classification Code	Compustat Annual
Intangible Ratio	The ratio of intangible assets to total assets at the most recent fiscal year end prior to the election cycle end	Compustat Annual
Inverse Mills Ratio	The ratio of the probability density function to the cumulative distribution function of a distribution computed from a probit model predicting the likelihood of a firm to give politically using firm size, sales, number of employees, business segments, geographic segments, book-to-market ratio, leverage, cash flow, industry market share, Herfindahl sales concentration index, regulated industry indicator, number of firms in industry with political action committee and industry government contracts relative to sales	CRSP, Compustat Annual, United States Treasury Bureau of the Fiscal Service
Leverage	The ratio of long-term debt to assets at the most recent fiscal year end prior to the election cycle end	Compustat Annual
Log (Federal Giving)	The log transformation of one plus the sum of a firm's political giving to campaigns for federal office in all states over the prior four year election cycle	National Institute on Money in State Politics
Log (Political Giving)	The log transformation of one plus the sum of a firm's political giving to campaigns for office in all states over the prior four year election cycle	National Institute on Money in State Politics
Log (Subsidy)	The log transformation of one plus the value of government subsidies received by the firm from state and local governments during the current year	Good Jobs First National Policy Resource Center Subsidy Tracker Database
Log (State Giving)	The log transformation of one plus the sum of a firm's state political giving to campaigns for office in all states over the prior four year election cycle	National Institute on Money in State Politics
Log (State Giving) * Federal	The sum of a firm's state political giving to campaigns for office in all states over the prior four year election cycle if the firm also gave to federal campaigns and zero otherwise	National Institute on Money in State Politics, Federal Election Commission

Table A.II Variable Definitions (Continued)

Variable	Measurement	Data Source
Log (Total Assets)	The log of one plus the total level of assets of the firm in millions of USD at the most recent fiscal year end prior to the election cycle	Compustat Annual
Market	The cumulative return over the twelve months prior to the election cycle end	CRSP
Market Capitalization	The total level of market capitalization of the firm in millions of USD at the most recent fiscal year end prior to the election cycle, using the price at the most recent month ending prior to the fiscal year end	CRSP, Compustat Annual
Maximum Political Giving Per Headquarter State Campaign	The maximum of all state political giving allocated to campaigns for office in the firm's headquarter state over the prior four year election cycle	National Institute on Money in State Politics
Momentum	The cumulative market-adjusted return over the twelve months prior to the election cycle end	CRSP
Political Giving Per Campaign	The ratio of total political giving to the total number of campaigns to which the firm gave politically during the election cycle	National Institute on Money in State Politics, Federal Election Commission
Post	Time period indicator equal to one for the periods following campaign finance reform in headquarter state of the treatment firm and zero otherwise	National Conference of State Legislatures; Stratmann and Aparicio-Castillo (2006); Christianson <i>et al.</i> (1996); Malbin and Gais (1998); <i>Campaign Finance Law</i>
Treatment * Post	State and time period indicator equal to one for firms previously giving politically above the subsequently imposed limit and headquartered in states reducing political giving limits for the periods following the law change and zero otherwise	National Conference of State Legislatures; Stratmann and Aparicio-Castillo (2006); Christianson <i>et al.</i> (1996); Malbin and Gais (1998); <i>Campaign Finance Law</i>
Post 12-Month Buy-and-Hold Abnormal Return	The cumulative market-adjusted return over the twelve months following the election cycle end	CRSP
Post 12-Month Buy-and-Hold Return	The cumulative return over the twelve months following the election cycle end	CRSP
Prior 12-Month Buy-and-Hold Abnormal Return	The cumulative market-adjusted return over the twelve months prior to the election cycle end	CRSP
Prior 12-Month Buy-and-Hold Abnormal Return	The cumulative market-adjusted return over the twelve months prior to the election cycle end	CRSP
R&D-to-Sales	The ratio of research and development expenses to sales at the most recent fiscal year end prior to the election cycle end	Compustat Annual

Table A.II Variable Definitions (Continued)

Variable	Measurement	Data Source
Republican (%)	The ratio of political giving to republican campaigns to total political giving over the prior four year election cycle	National Institute on Money in State Politics
Return-on-Assets	The ratio of net income to total assets at the most recent fiscal year end prior to the election cycle end	Compustat Annual
Size	The log of one plus the total level of market capitalization of the firm in millions of USD at the most recent fiscal year end prior to the election cycle, using the price at the most recent month ending prior to the fiscal year end	CRSP, Compustat Annual
State Giving	The sum of a firm's state political giving to campaigns for office in all states over the prior four year election cycle	National Institute on Money in State Politics
State Political	Binary equal to one where the firm gives politically to state but not federal political campaigns and zero otherwise	National Institute on Money in State Politics
Subsidy	Binary equal to one if the firm receives a government subsidy from state and local governments during the current year	Good Jobs First National Policy Resource Center Subsidy Tracker Database
Tobin's Q	The ratio of total assets less book value of equity plus market value of equity at the month prior to the fiscal year end to total assets at the most recent fiscal year end prior to the election cycle end	Compustat Annual
Total Headquarter State Political Giving	The firm's total state political giving allocated to campaigns for government offices in the state where the firm is headquartered during the election cycle	National Institute on Money in State Politics, Compustat Annual
Treatment	State indicator equal to one for firms previously giving politically above the subsequently imposed limit and headquartered in states reducing political giving limits and zero otherwise	National Conference of State Legislatures; Stratmann and Aparicio-Castillo (2006); Christianson <i>et al.</i> (1996); Malbin and Gais (1998); <i>Campaign Finance Law</i>

VITA

Douglas Brian Blank II was born and raised in Birmingham, Alabama. He is a graduate from Mountain Brook High School, and he received his undergraduate education through the University Scholars Program at the University of Alabama. In May of 2010, he graduated cum laude with his Bachelors of Science degree from the University of Alabama in Business Administration with an emphasis in Finance and Mathematics. Further, he simultaneously earned Masters of Science degrees in Finance and Applied Statistics.

Brian began his pursuit of a doctoral degree in finance at the University of Tennessee in July of 2012. He has had the privilege of learning from the excellent faculty group in the Haslam College of Business throughout his four-year doctoral program. In particular, he worked closely with Dr. Tracie Woidtke in developing his research capability. Brian's research expertise lie in corporate finance and governance. Brian will graduate with a Ph.D. in Business Administration with a concentration in finance in August of 2016, at which time he will join the faculty in the Department of Finance and Economics within the College of Business at Mississippi State University, where he hopes to achieve his research and teaching goals.

Before beginning his doctoral studies, Brian was employed as a consultant with Accounting, Economics and Appraisal Group in Birmingham, Alabama. During college, Brian was a teaching assistant in the Department of Economics, Finance and Legal Studies at the University of Alabama. He also worked with the University of Alabama Career Center as a career consultant. Brian has been employed as a research assistant for the Department of Finance at the University of Tennessee since 2012.