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Corporate Lobbying and Fraud Detection

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Abstract

This paper examines the relation between corporate lobbying and fraud detection. Using data on corporate lobbying expenses between 1998 and 2004, and a sample of large frauds detected during the same period, we find that firms' lobbying activities make a significant difference in fraud detection: Compared to nonlobbying firms, on average, firms that lobby have a significantly lower hazard rate of being detected for fraud, evade fraud detection 117 days longer, and are 38% less likely to be detected by regulators. In addition, fraudulent firms on average spend 77% more on lobbying than nonfraudulent firms, and they spend 29% more on lobbying during their fraudulent periods than during nonfraudulent periods. The delay in detection leads to a greater distortion in resource allocation during fraudulent periods. It also allows managers to sell more of their shares.

I. Introduction

Corporations have been one of the most important players in lobbying activities. Take Enron, for example: Since its creation in 1985, lobbying had been a key part of Enron's strategy. The company maintained in-house high-profile lobbyists and hired top lobbying firms. It had spent more than $5 million on lobbyists since 1997 and was registered to lobby in 28 states by the year 2002. Before its fall as the biggest bankruptcy in the history of the United States, Enron had gained favorable treatment by lobbying Congress, federal and state governments, and various

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regulatory agencies on 49 occasions.[1] These included the removal of price controls on natural gas, the allowance of certain types of debt off the books, and the blocking of government regulation on its derivatives trading. John Dean, a former Counsel to President Richard Nixon, argued that Enron's lobbying activities and campaign contributions "may have helped slow detection of its troubles, and helped the company fly under the radar for as long as was possible given what now appear to be some egregious accounting and business practices."[2]

Enron is not the only corporation that has been active in lobbying. In 2005 alone, $2.14 billion was spent on lobbying by corporations and industry groups. More than ½ of former congressmen or Senate members work as lobbyists hired by corporations.[3] Given the significant financial and human resources allocated to corporate lobbying, what impact does lobbying have on corporate governance? In this paper, we investigate how lobbying affects corporate governance in the context of fraud detection.

Being able to detect fraud in a timely manner is an indication of the overall effectiveness of a corporate governance system. We observe that firms like Enron and WorldCom spent millions on lobbying, were able to avoid detection, and continued their misconduct for years. These anecdotes suggest that lobbying may directly or indirectly affect economic agents who are designed to uncover fraud. In this paper we seek to understand the effect of lobbying activities on fraud detection by asking the following questions: Is there a systematic link between corporate lobbying and fraud detection? Are fraudulent firms more likely to spend more on lobbying? And how is the involvement in lobbying activities associated with fraud detection and the welfare of economic agents, such as managers?

Using data on corporate lobbying expenses between 1998 and 2004, and a set of large corporate frauds detected during the same period, we find that corporate lobbying makes a significant difference in fraud detection. Fraudulent firms involved in lobbying activities have a significantly lower hazard rate of being detected than fraudulent firms not involved in lobbying, after controlling for factors such as firm size, book-to-market ratio, motivation for fraud, type of detecting agents, and industry fixed effect. On average, fraudulent firms involved in lobbying are able to evade detection 117 days longer—and even longer after we control for firm size and industry. Further, fraudulent firms involved in lobbying are 38% less likely to be detected by regulators than those not involved in lobbying.

We find that fraud is associated with a systematically higher level of lobbying expense. Fraudulent firms on average spend significantly more on lobbying than nonfraudulent firms. To mitigate the problem of omitted variables, we adopt the difference-in-difference analysis and find that fraudulent firms increase their lobbying expenses after they commit fraud.

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[1] "A Most Favored Corporation: Enron Prevailed in Federal and State Lobbying Efforts 49 Times" (*The Center for Public Integrity Report* (Jan. 6, 2003)). The report concludes that "(Enron's) successful efforts to deregulate electricity and natural gas markets paved the way to its rise, and the exemptions it won from regulatory scrutiny may have contributed to its collapse. Lobbying was a critical component in both the company's rise and fall."

[2] "Some Questions about Enron's Campaign Contributions: Did Enron Successfully Buy Influence with the Money It Spent?" (*Findlaw's Legal News and Commentary* (Jan. 18, 2002)).

[3] Source: http://www.politicalmoneyline.com

Last, we explore the welfare implications of delay in fraud detection on both firms and their managers. We first document evidence that delay in fraud detection affects the private benefits of managers. During the fraudulent period, insider sales of shares of firms with lobbying activities are significantly higher than those of firms without lobbying. By contrast, there is no difference in insider purchases during the fraudulent period between the 2 types of firms, nor is there any difference in insider trading activities during nonfraudulent periods. The delay in fraud detection seems to benefit managers by giving them more time to sell their shares before the decline in the value of the firm occurs when fraud surfaces.

Kedia and Philippon (2009) find that distortion of the allocation of economic resources arises from the overinvestment of firms during their periods of suspicious accounting. In the context of fraud detection, we explore how the delay in detection affects the degree of distortion by fraudulent firms. Compared to firms that do not lobby, those that lobby tend to invest and hire more excessively during their fraudulent periods. By contrast, there is no difference in expansion activities between the 2 types of firms before or after fraudulent periods. Our findings suggest that delay in fraud detection exacerbates the resource misallocation in the economy.

Our study sheds light on the recent debate about whether to improve the transparency in corporate political spending. Many firms have argued against detailed disclosure of political spending, citing objections such as the possibility of revelation of corporate strategy to competitors, distractions to management, and negligible impact on shareholder values.[4] Our results suggest that political spending does affect the welfare of investors and that there is a need for more transparency in corporate political spending. Our results, however, should not be interpreted as evidence that the delay in fraud detection itself is the only motivation and consequence of lobbying, or that corporate lobbying is inefficient in general. Since our study focuses on examining the effect of lobbying on fraud detection, broader issues, such as why firms lobby and what types of firms are more likely to commit fraud, are left for future research.

Our paper is the first of which we are aware to empirically investigate how corporate lobbying affects corporate governance. Since lobbying helps build and sustain political connections, our findings are related to the literature on the impact of political connections. Most studies focus on how political connections affect firms' value or stock returns (e.g., Roberts (1990), Fisman (2001), Jayachandran (2006), Fan, Wong, and Zhang (2007), Aggarwal, Meschke, and Wang (2009), Cooper, Gulen, and Ovtchinnikov (2010), and Faccio and Parsley (2009)). Several studies explore the effect of political connections on firms' financing and operations (e.g., Agrawal and Knoeber (2001), Johnson and Mitton (2003), Gupta and Swenson (2003), Khwaja and Mian (2005), Faccio, Masulis, and McConnell (2006), and Claessens, Feijen, and Laeven (2008)). By contrast, relatively few papers have directly studied the relationship between political connections and corporate governance systems. However, this relationship can be

[4] "Shining Light on Corporate Political Gifts" (*The New York Times* (Dec. 16, 2005)) and "Does Your Company Keep Political Secrets?" (*Fortune* (May 31, 2006)).

important, since a large body of law and finance literature emphasizes that the legal system is fundamental to investor protection (e.g., La Porta, Lopez-de-Silanes, Shleifer, and Vishny (2000)), yet in practice corporations can significantly influence the operating efficiency and objectivity of a legal system. Our study attempts to explore the effect of political connections on governance by examining the relation between corporate lobbying and fraud detection.

Our paper is also related to the literature on corporate fraud. Most empirical research on corporate fraud has focused on either the role of executive compensation or corporate governance characteristics. A number of papers link fraud to equity compensation for executives (e.g., Burns and Kedia (2006), Efendi, Srivastava, and Swanson (2007), Peng and Röell (2008), and Johnson, Ryan, and Tian (2009)). Other papers link fraud to corporate boards lacking independence or financial and accounting expertise, or to business conditions (e.g., Beasley (1996), Dechow, Sloan, and Sweeney (1996), Agrawal and Chadha (2005), and Wang, Winton, and Yu (2010)). On the other hand, relatively few papers have directly studied the detection of fraud. Dyck, Morse, and Zingales (2010) examine which monitoring devices are more effective in detecting fraud. Wang (2009) studies the interaction between corporate investment decisions and fraud detection. There is also literature in accounting focusing on the role of auditors in preventing and detecting fraud (see, e.g., Francis (2004)) and on the role of financial analysts in reducing earnings manipulations (Yu (2008)). By contrast, our study contributes by suggesting that corporate lobbying is another factor that affects fraud detection.

The rest of the paper is organized as follows. Section II provides a brief description of corporate lobbying. Section III describes the construction of our data sample. Section IV examines whether fraudulent firms that lobby can evade detection longer than fraudulent firms that do not lobby. Section V tests whether fraudulent firms are more likely to spend more on lobbying than nonfraudulent firms. Section VI explores the welfare implications of delay in fraud detection. Section VII concludes the paper.

II. Background on Corporate Lobbying

A. The Lobbying Disclosure Act of 1995

Lobbying is the practice of attempting to directly influence the actions of government to follow policies desired by lobbyists. According to the Lobbying Disclosure Act of 1995 (LDA), which governs the disclosure of lobbying, a *lobbying contact* is any oral or written communication (including an electronic communication) to an executive branch official or a legislative branch official that is made on behalf of a client with regard to the formulation, modification, or adoption of federal laws, executive orders, or government contracts, etc.[5]

[5]Specifically, the communication is with regard to i) the formulation, modification, or adoption of federal legislation (including legislative proposals); ii) the formulation, modification, or adoption of federal rule, regulation, executive order, or any other program, policy, or position of the U.S. government; iii) the administration or execution of a federal program or policy (including the negotiation, award, or administration of a federal contract, grant, loan, permit, or license); or iv) the nomination or

The LDA was signed into law on December 19, 1995, and took effect on January 1, 1996. It requires any firm or organization whose lobbying expenses exceed $20,000 semiannually to register with the Secretary of the Senate and the Clerk of the House of Representatives within 45 days after it first makes a lobbying contact. The registration also applies to any lobbyist whose total income for lobbying activities on behalf of a client it represents exceeds $5,000. The enactment of the LDA reflects legislative efforts to bring accountability and transparency to lobbying practices in the United States. The law was amended substantially by the Honest Leadership and Open Government Act of 2007, which further strengthened public disclosure requirements concerning lobbying activities and funding.

B. Corporate Lobbying Activities

Lobbying is one of the most prominent ways for corporations to influence legislation. For example, in the 1997–1998 election cycle, expenditures on lobbying were $2.6 billion, more than 9 times the campaign contributions given by political action committees (PACs) (Milyo, Primo, and Groseclose (2000)). Expenditures on lobbying in the United States reported to the federal government totaled $1.45 billion in 1999. In comparison, PACs contributed $259.8 million, and soft money contributions totaled nearly $500 million in the year 2000 election cycle (Baron (2002)).[6]

Corporations' lobbying expenses are usually applied toward in-house lobbyists or specialized lobbying firms. Corporations can also spend on gifts, meals, and free trips for legislators. For example, in the past 5 years, Congress members have received more than $18 million in travel benefits provided by private organizations. More than ½ of the representatives and senators who leave office become lobbyists. Since 1998, about 250 former Congress members and federal agency chiefs have become lobbyists. These lobbyists usually have inside connections to current members in Congress and can provide corporations with access to legislators.

In general, since corporate lobbying activities are associated with a firm's business strategy, culture, and even ethics, and confer a multitude of advantages, lobbying can potentially make fraud more difficult to uncover. First, corporations can directly influence fraud detection by regulators by lobbying watchdogs such as the Securities and Exchange Commission (SEC) and the Government Accountability Office (GAO).[7] Second, corporations lobby for favorable regulation rules. Examples include Enron's lobbying to allow certain types of debt off the books and to block regulation of trading in energy derivatives. Third, since

confirmation of a person for a position subject to confirmation by the Senate. For details, please see http://lobbyingdisclosure.house.gov/lda.html.

[6]In contrast to campaign contributions, lobbying is less dependent on election cycles. It allows corporations to target specific legislation and agencies in addition to the representatives and senators. Unlike campaign contribution, where the location is shown to be a primary determinant (Wright (1985)), any corporations can hire a lobbyist, regardless of location.

[7]For example, according to the Center for Public Integrity, 309 corporations and organizations attempted to influence GAO investigations between 1998 and 2004.

bad performance usually triggers fraud detection, fraudulent firms can reduce detection risk by gaining favorable business conditions through lobbying. For example, Global Crossing lobbied to block competition from building a transpacific fiber-optical cable, preventing rivals from dominating the market.[8] Enron lobbied for removing price controls on natural gas and for deregulation of the electric utility industry. Last, but not least, corporations use their lobbying ties to obtain political intelligence to help them better react to incoming policy changes. A recent example is the hiring of lobbyists by several hedge fund managers for tips and predictions regarding market-moving information through their political connections.[9]

III. Sample Selection

A. The Lobbying Sample

The LDA requires that firms spending more than $20,000 on direct lobbying activities semiannually must file with the Senate Office of Public Records (SOPR) and the Clerk of the House of Representatives. Starting in 1998, Political Money Line (PML) of Congressional Quarterly Inc. has maintained a database of the semiannual expense records that companies, labor unions, and other organizations have spent to lobby Congress and federal agencies, based on their lobbying disclosure reports filed with SOPR.

We construct the lobbying sample using lobby spending information obtained from PML. The sample period starts in the 2nd half of 1998 and ends in the 1st half of 2005. To compute a firm's annual lobby spending, we sum its midyear and year-end lobbying expenditures. In the case where a private subsidiary of a publicly traded parent company lobbies, we attribute its lobby spending to the parent firm. After matching with Compustat, we have 2,053 firm-year observations over 8 years.

One limitation of the data is that we are unable to observe the indirect lobbying efforts through individual firms' contributions to industrial organizations that lobby on their behalf. Since industry associations normally do not disclose the source of their funding, we are unable to collect this information on indirect lobby spending by individual firms, and thus we may underestimate some firms' actual lobbying expenses and intensity. Nevertheless, the lobbying sample suggests that indirect lobbying efforts through industrial organizations appear to be small compared to direct lobbying activities. Take the energy industry, for example. In 2001, the total lobby spending by the industry was about $55 million, of which $4.2 million was contributed by energy industry organizations. In addition, an industry association's lobbying activities tend to be related to industry characteristics, and its operations, to industry leaders. Our control for industry fixed effects and firm size in all our tests should help reduce this potential bias.

[8] "Global Crossing Tossed More Cash around Town than Enron" (*Business Week* (Feb. 11, 2002)).

[9] "Hedge Funds Hire Lobbyists to Gather Tips in Washington" (*The Wall Street Journal* (Dec. 8, 2006)).

Another limitation of the data is that LDA only requires corporations to provide information on total lobbying expenses, but not a detailed breakdown of expenses in each lobbying area. It is difficult to directly measure which channels corporations divert the most money toward. Nevertheless, LDA requires companies to report which government agents they contacted for each individual lobbying issue. This enables us to use frequency of contact as an alternative proxy for lobbying effort, with the assumption that the frequency of contact is positively correlated to the money spent and time used by lobbyists and management.

Throughout the paper, we label firms that are engaged in lobbying activities in the sample period as "lobbying firms" and firms that are not engaged in lobbying as "nonlobbying firms."

B. The Fraud Sample

We obtain a sample of large frauds from Dyck et al. (2010), who assemble the sample based on companies that are subject to lawsuits from the Stanford Securities Class Action Clearinghouse.[10] To control for frivolous lawsuits, they restrict the sample period to 1996–2004, after the passage of the Private Securities Litigation Reform Act of 1995, which was designed to reduce frivolous lawsuits. They exclude all cases where the judicial review process leads to their dismissal. In addition, they restrict the sample to corporate frauds with a settlement amount of at least $2.5 million, a threshold level of payment suggested by previous studies that helps separate frivolous lawsuits from meritorious ones. To reduce the problem of undetected fraud, they restrict the sample to corporate frauds with assets of at least $750 million in the year before the fraud is detected, as large firms are subject to more intense public scrutiny and lawyers have a stronger incentive to uncover their fraudulent activities.

The final sample of Dyck et al. (2010) contains 239 frauds detected between 1996 and 2004. It also contains manually collected information on each fraud and its detection, such as the motivation of the fraud, the economic agent that first brought the fraud to light, and the dates when fraud was committed and detected. In this study, we exclude frauds detected before 1998 due to lack of lobbying information. Our final fraud sample contains 205 frauds detected between 1998 and 2004. For most of the frauds, we are also able to collect information from the Stanford Securities Class Action Clearinghouse on settlement amounts for lawsuits following fraud detection.

For firms in the lobbying sample and the fraud sample, we obtain accounting data, such as the book values of assets and equity, from Compustat. Stock prices and daily returns are from the Center for Research in Security Prices (CRSP). For our insider trading analysis, we obtain insider trading information from the Thomson Financial Insider Filing database.

[10] For a detailed description of the sample construction and related references, please see Dyck et al. (2010).

C. Descriptive Statistics

Table 1 presents the summary statistics of the lobbying sample. Panel A reveals that an average (median) firm spends $2.03 million ($1.17 million) on lobbying each year during our sample period. Since lobbying expenses are generally not tax deductible, the actual cost is higher than other types of deductible corporate expenses.[11] Panel A also indicates that lobbying expenses tend to be stable over time, as the yearly fluctuation is usually smaller than 10%. Panel B shows that firms tend to lobby on a regular basis: 47% of firms lobbied every year in the 8-year period, and 73% of firms lobbied at least 5 out of 8 years.

Panel C of Table 1 describes how frequently government agencies are contacted by our sample firms for the period 1999–2005. We manually collect the names of government agencies being contacted by every organization from the LDA Records Database, available from the Web site of the U.S. Senate, with records starting from 1999.[12] We classify a legal or regulatory entity identified in the database based on the following categories: Federal Legislation, Agencies for Economic and Trade Activities, Administrations, Regulators for Financial Activities, and Criminal Investigation Agencies.[13] We then merge it with our lobbying sample.

Panel C of Table 1 presents lobbying intensity by fraudulent and nonfraudulent firms in our sample toward a particular government entity. Columns 1 and 2 report the number of lobbying contacts conducted by an average firm per year. Fraudulent firms contact government agencies much more frequently than nonfraudulent firms (109.7 times per firm per year vs. 70.6 times per firm per year). Among all government entities, the legislation agents (Senate and House of Representatives) rank at the top of the list and account for about ⅓ of all the lobbying contacts (32.7 contacts by an average fraudulent firm per year vs. 23.4 contacts by a nonfraudulent firm). The agencies for economic and trade activities rank 2nd (15.9 times by a fraudulent firm vs. 8.6 times by a nonfraudulent firm). The frequency of contact with agencies responsible for regulating financial activities (including SEC, GAO, and IRS), as well as criminal investigation agencies, is relatively low. While firms can directly lobby agencies that are responsible for

[11] See http://www.efile.com/tax-deduction/employee-expense-deduction/employment-deductions/

[12] The LDA Record Database can be accessed at http://www.senate.gov/legislative/Public_Disclosure/LDA_reports.htm

[13] Specifically, Federal Legislation includes: U.S. Senate, House of Representatives, and Congressional Budget Office. Agencies for Economic and Trade Activities includes: Department of Commerce, Council of Economic Advisers (CEA), Federal Trade Commission (FTC), International Trade Administration (ITA), National Economic Council (NEC), Overseas Private Investment Corp. (OPIC), Patent and Trademark Office (PTO), U.S. Trade Representative (USTR), Trade and Development Agency (TDA), U.S. International Trade Commission, and the Export-Import Bank of the United States. Administrations includes: President of the United States, Vice President of the United States, and the Department of State. Regulators for Financial Activities includes: Commodity Futures Trading Commission, Office of the Comptroller, Securities and Exchange Commission (SEC), the Government Accountability Office (GAO), the Federal Reserve System, Internal Revenue Service (IRS), and the Department of Treasury. Criminal Investigation Agencies includes: Federal Bureau of Investigation (FBI), the Department of Justice, and the Department of the Interior.

TABLE 1

Summary Statistics for the Lobbying Sample

The sample period for the lobbying sample is 1998–2005. The sample consists of 2,053 firm-year observations that are involved in lobbying activities. Information regarding these firms and their lobbying expenditures is from the Political Money Line of Congressional Quarterly Inc. and the U.S. Senate LDA database. In Panel A, a firm's annual lobby spending (in thousands of dollars) is the sum of its midyear and year-end lobbying expenditures. In the case where a private subsidiary of a publicly traded parent company lobbies, we attribute its lobbying expenditure to the parent firm. Panel B reports the number of years a sample firm has spent on lobbying. A firm is counted as spending on lobbying in a given year if it files at least one report with the Secretary of the Senate and the Clerk of the House of Representatives in that year. In Panel C, the sample contains firms that are involved in lobbying activities between 1999 and 2005. We define a firm as a fraudulent firm if it is detected for fraud between 1996 and 2004. We obtain the information on government agencies from the LDA Records Database, available from the U.S. Senate Web site (http://www.senate.gov) with records starting from 1999. We classify a legal or regulatory entity based on the following categories: Federal Legislation, Agencies for Economic and Trade Activities, Administrations, Regulators for Financial Activities, and Criminal Investigation Agencies. The detailed classifications are described in footnote 13. Columns 1 and 2 report the average annual lobbying frequency (number of contacts) to a government entity by a fraudulent firm and a nonfraudulent firm, respectively. Column 3 reports the lobbying frequency targeted to a government entity as a fraction of total number of contacts by fraudulent firms during the sample period. Column 4 reports the lobbying frequency targeted to a government entity as a fraction of total number of contacts by nonfraudulent firms during the sample period.

Panel A. Annual Lobby Spending

Year	Mean	Median	25th Percentile	75th Percentile	Standard Deviation	No. of Firms
1998	2,213.28	1,320	800	2,840	2,555	211
1999	1,894.71	1,120	660	2,480	1,970.66	242
2000	1,986.54	1,140	660	2,453.35	2,209.44	240
2001	1,926.71	1,140	598	2,695.95	2,120.87	251
2002	2,081.24	1,230	690	2,375	2,279.13	245
2003	1,985.61	1,138.95	620	2,220	2,367.86	280
2004	1,955.75	1,110.34	640	2,180	2,450.60	304
2005	2,199.17	1,335.60	760	2,590	2,549.87	280
Total	2,027.32	1,167	680	2,480	2,324.62	2,053

Panel B. Frequency of Lobbying Activities

No. of Years Spent on Lobbying	No. of Firms	% of Total
8	968	47.15%
7	210	10.23%
6	132	6.43%
5	190	9.25%
4	168	8.18%
3	153	7.45%
2	144	7.01%
1	88	4.29%
Total	2,053	100%

Panel C. Which Government Agencies Do Firms Lobby?

	No. of Annual Contacts		% of Contacts	
Government Entities	Fraudulent Firms (1)	Nonfraudulent Firms (2)	Fraudulent Firms (3)	Nonfraudulent Firms (4)
Legal and Regulatory Entities				
Federal legislation	32.7	23.4	30%	33%
Agencies for economic and trade activities	15.9	8.6	14%	12%
Administrations	11.3	7.2	10%	10%
Regulators for financial activities	6.6	5.3	6%	7%
Criminal investigation agencies	4.0	1.9	4%	3%
Industry Regulators				
Military, defense, and national security	7.9	3.8	7%	5%
Department of Agriculture (USDA)	1.6	0.8	1%	1%
Department of Education	0.6	0.5	1%	1%
Energy	3.2	3.2	3%	4%
Transportation	6.0	3.2	5%	5%
Healthcare and medical	5.5	3.0	5%	4%
Labor	1.9	1.7	2%	2%
Technology	3.0	1.8	3%	3%
Environment	3.5	3.0	3%	4%
Others	6.0	3.1	5%	4%
Total	109.7	70.6	100%	100%

regulating financial and criminal activities, they appear to be more likely to lobby legislative entities such as the Senate and House, which oversee the operations of these agencies. In addition, we observe a positive and significant correlation of 44% ($p = 0.00$) between the frequency of contact with government agencies per firm per year and the dollar amount of its lobby spending.

Next, we explore whether there is a different focus between fraudulent and nonfraudulent firms in our sample in terms of which government entities to lobby. Column 3 in Panel C of Table 1 reports the number of contacts targeted at a given government agency as a fraction of the total number of lobbying contacts conducted by all fraudulent firms. Column 4 reports this fraction based on the total number of lobbying contacts by all nonfraudulent firms. We observe that while fraudulent firms lobby more frequently than nonfraudulent firms, there is no systemic difference in government entities that lobbying activities are focused on between the 2 types of firms. Both types of firms exhibit similar patterns as to which agency they are more likely to lobby.

Table 2 reports the descriptive statistics for the fraud sample. Panel A reports the frequency of frauds by the year when fraud occurred. A majority of the frauds (about 77%) are committed during the period of 1998–2001. Panel B reports the frequency of frauds by the year when fraud was detected. A significant fraction of fraud (over 45%) is detected between 2001 and 2002, a time coinciding with a significant stock market decline.

TABLE 2

Summary Statistics for the Fraud Sample

The fraud sample is from Dyck et al. (2010) and consists of 205 frauds detected between 1998 and 2004. The sample is based on the Stanford Securities Class Action Clearinghouse and is restricted to firms with assets of at least $750 million in the year before the fraud is detected, and with settlements of at least $2.5 million. Duration of fraud is the number of days over a fraudulent period, where a fraudulent period is defined as the period between the time when a firm commits a fraud and the time when the fraud is detected. Panel A reports the annual frequency and the average duration of fraud based on the year when a fraud is committed. Panel B reports the annual frequency and the average duration of fraud based on the year when a fraud is detected. In Panel C the sample is based on Dyck et al. and contains large frauds detected between 1998 and 2004. The sample size reduces to 197 frauds due to the data requirements from Compustat. Market value and book value of equity are in the year before fraud detection. Book-to-market is the book-to-market value of equity in the year before fraud detection. Duration of fraud is the number of days over a fraudulent period, where fraudulent period is defined as the period between the time when a firm commits a fraud and the time when the fraud is detected. The last column reports *p*-values testing the difference in mean between fraudulent firms that are involved in lobbying activities and those that do not lobby. In Panel D the sample is based on Dyck et al. and contains large frauds detected between 1998 and 2004. The sample size reduces to 197 frauds due to the data requirements from Compustat. The industries are defined according to the Fama-French 10 industries. Regulated industries include the Utility and Finance industries. The remaining 8 industries are grouped into unregulated industries.

Panel A. Number of Frauds by Year When Fraud Begins

			Duration of Fraud (no. of days)	
Year When Fraud Begins	Count	% of Total	Mean	Median
1995	3	1.46%	1,297	1,400
1996	1	0.49%	930	930
1997	19	9.27%	830	599
1998	40	19.51%	730	520
1999	42	20.49%	827	987
2000	42	20.49%	572	436
2001	33	16.10%	421	437
2002	14	6.83%	298	253
2003	10	4.88%	305	293
2004	1	0.49%	126	126
Total	205	100%	633	456

(continued on next page)

TABLE 2 (continued)
Summary Statistics for the Fraud Sample

Panel B. Number of Frauds by Year When Fraud is Detected

Year When Fraud is Detected	Count	% of Total	Duration of Fraud (no. of days) Mean	Median
1998	21	10.24%	411	288
1999	23	11.22%	393	350
2000	23	11.22%	410	252
2001	33	16.10%	460	400
2002	60	29.27%	756	641
2003	28	13.66%	1,038	924
2004	17	8.29%	766	459
Total	205	100%	633	456

Panel C. Characteristics of Fraudulent Firms (lobbying vs. nonlobbying)

	Lobbying		Nonlobbying		
	Mean	Median	Mean	Median	*p*-Value
Market value of equity (in millions of dollars)	38,777.09	20,377.38	5,825.54	1,677.09	0.00
Book value of equity (in millions of dollars)	11,902.49	6,569.38	1,743.31	699.35	0.00
Book-to-market ratio	0.88	0.28	0.58	0.40	0.38
Assets (in millions of dollars)	53,206.34	24,917.91	9,530.54	2,541.22	0.00
Duration of fraud (no. of days)	711.12	510.00	594.17	417.00	0.10
Settlement amount (in millions of dollars)	513.29	78.50	195.51	19.00	0.00

Panel D. Industry Distribution of Fraudulent Firms (lobbying vs. nonlobbying)

	Lobbying		Nonlobbying	
	Count	% of Total	Count	% of Total
Fama-French 10 Industries				
Consumer products	2	3%	10	7%
Manufacturing	4	6%	9	7%
Energy	1	2%	3	2%
High tech	10	16%	22	16%
Telecommunication	13	21%	6	4%
Wholesale and retail	3	5%	15	11%
Healthcare	11	18%	12	9%
Finance	7	11%	31	23%
Utility	6	10%	12	9%
Others	5	8%	14	10%
Regulated industries	13	22%	43	32%
Unregulated industries	49	78%	92	68%
Total	62	100%	135	100%

Panel C of Table 2 describes the characteristics of firms in our fraud sample. Compared to fraudulent firms not involved in lobbying activities, those that lobby are significantly larger in terms of market capitalization and asset base. They also have a higher book-to-market ratio, although the difference is not statistically significant. These results are consistent with our prior observation that big and well-established firms have a greater incentive to lobby, while small and growth firms are less likely to lobby.

Panel C of Table 2 provides preliminary evidence that it takes longer to detect fraud for firms involved in lobbying activities. The duration of fraud (calculated as the number of days between the time when a firm commits a fraud and the time when the fraud is detected) is 594 days for an average firm that does not lobby. By contrast, the average is 711 days for firms that do lobby, an additional 117 days ($p = 0.10$), or 20% more time. Using median instead of mean, it takes 93 more days ($p = 0.03$), or 22% more time, to detect frauds from firms that lobby.

Panel C also shows that the settlement amount for fraudulent firms that lobby is on average more than twice the amount for those that do not lobby. This suggests that lobbying intensity is associated with fraud severity.

Panel D of Table 2 reports the industry distribution of frauds in our sample. Similar to previous studies, we observe that fraud occurrences tend to cluster within industries. Among fraudulent firms that do not lobby, 50% of frauds occur in the 3 Fama-French (mba.tuck.dartmouth.edu/pages/faculty/ken.french/data_library.html) 10 industries: finance (23%), high tech (16%), and wholesale and retail (11%). Among fraudulent firms that lobby, 13% were in the telecommunication industry, followed by 11% in healthcare and 10% in high tech. In addition, 32% of frauds in the nonlobbying group and 22% of frauds in the lobbying group occurred in regulated industries.

IV. Do Lobbying Firms Evade Detection Longer?

Does corporate lobbying have any impact on fraud detection? We explore this question from 3 perspectives. First, we conduct a regression analysis to examine whether it takes longer to detect fraud by firms that are involved in lobbying activities. Next, we use survival analysis to examine whether fraudulent firms that lobby have a higher probability of evading detection than fraudulent firms that do not lobby. Finally, we investigate which economic agents capable of detecting fraud have been impacted the most by lobbying activities.

A. Days Taken to Detect Fraud

We define "days taken to detect fraud" as the length (number of days) of the period from the commission of a fraud to the detection of a fraud. Panel C of Table 2 reveals that, on average, it takes 117 additional days to detect fraud for firms that are involved in lobbying activities. To measure a firm's lobbying effort, we use a dummy variable for lobbying activities, a variable equal to 1 if a firm is involved in lobbying during the sample period, and 0 otherwise, as well as average lobbying expenses. We then regress days taken to detect fraud on the dummy variable for lobbying activities. Since Panels C and D of Table 2 reveal that lobbying firms differ from nonlobbying firms in market capitalization, book-to-market ratio, and industry distributions, we control for size, book-to-market ratio, and industry fixed effect (Fama-French 10 industries) in our regressions.[14]

Column 1 of Table 3 reports the results. The coefficient associated with the dummy variable for lobbying activities is positive and significant. On average, it takes 349 more days to detect fraud for a lobbying firm than for a nonlobbying firm in the same industry with similar size and book-to-market ratio.

Since not all frauds are equally important and some frauds are more severe than others, we also follow Dyck et al. (2010) and run value-weighted (VW)

[14]In untabulated regressions, we also try adding control variables such as abnormal stock return before detection, board size (as a control for corporate governance), the number of business segments, and the number of geographic segments of the firm (as a control for business complexity of the firm). The results remain unchanged.

TABLE 3

Does It Take Longer to Detect Fraud from Firms Involved in Lobbying Activities?

Table 3 reports the results from multivariate cross-sectional regressions. The sample period is 1998–2004. A lobbying firm is defined as a firm that is engaged in lobbying activities during the sample period, and a nonlobbying firm is a firm that is not engaged in lobbying activities. The dependent variable is days taken to detect fraud, which is the number of days over a fraudulent period, where a fraudulent period is defined as between the time when a firm commits a fraud and the time when the fraud is detected. Dummy variable for lobbying activities is equal to 1 if a firm is engaged in lobbying activities during the sample period, and 0 otherwise. Average lobby spending is the average semiannual lobbying expenses (in millions of dollars) that a lobbying firm spent during the sample period. Size is the log value of market value of equity in the year before fraud detection. Book-to-market ratio is the book-to-market value of equity in the year before fraud detection. Detection year is equal to 1 if a firm is detected for fraud in a particular year, and 0 otherwise. Type of detecting agents is 1 of the 8 categories of the parties who first detected a fraud: regulators, analysts, blockholders, employees and other stakeholders, firm, insiders, media, and professional services. The industry classification of each company is defined by the Fama-French 10 industries. We use settlement amount as weight for value-weighted (VW) regressions. Standard errors are in parentheses. ***, **, and * indicate significance at the 1%, 5%, and 10% levels, respectively.

	EW (1)	VW (2)	EW (3)	VW (4)	EW (5)	VW (6)	EW (7)	VW (8)
Dummy for lobbying activities	349.19*** (92.07)	258.93** (118.75)			257.35*** (83.41)	188.85** (94.89)		
Average lobby spending			168.04*** (57.72)	128.06** (59.07)			109.31** (54.36)	98.28** (47.01)
Book-to-market	–10.72 (16.13)	–19.36** (9.11)	–4.66 (16.24)	–14.14* (7.72)	–2.72 (14.92)	–7.44 (7.67)	2.07 (15.03)	–3.91 (6.74)
Size	–57.32** (22.53)	–60.50** (29.82)	–41.10* (21.86)	–48.14* (24.43)	–59.89*** (21.56)	–62.96** (24.22)	–46.52** (21.55)	–56.23** (22.45)
Constant	987.38*** (175.85)	1,067.39*** (233.82)	903.00*** (175.65)	1,005.93*** (203.80)	1,022.86*** (214.56)	1,153.19*** (316.65)	978.11*** (221.53)	1,157.61*** (303.93)
Industry fixed effect	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Detection year fixed effect	No	No	No	No	Yes	Yes	Yes	Yes
Detection agent fixed effect	No	No	No	No	Yes	Yes	Yes	Yes
No. of obs.	192	192	192	192	189	189	189	189
R^2	0.15	0.13	0.19	0.18	0.19	0.18	0.37	0.35

regressions using the settlement amount as weight. We use the log version of settlement amount due to the skewness of the distribution. If the settlement amount information is missing, we use the value of median settlement amount. Column 2 of Table 3 reports the results based on VW regressions. We observe a similar finding as in equal-weighted (EW) regressions: The dummy variable for lobbying activities continues to be positively and significantly related to the days taken to detect fraud.

Instead of using the dummy variable for lobbying activities, we also use average semiannual lobbying expenses to measure a firm's lobbying efforts. Columns 3 and 4 of Table 3 present the results based on EW and VW regressions, respectively. Again, the coefficient is positive for both EW (168.04) and VW (128.06) regressions, and it is significant at the 5% level. The results suggest that a million-dollar increase in semiannual lobbying expenses is associated with approximately 4–5 more months to detect a fraud.

Dyck et al. (2010) classify the agent who first detected a fraud into 1 of 8 types: regulators, analysts, blockholders, employees and other stakeholders, firm, insiders, media, and professional services. They show that the type of detecting agent affects the speed of detection. In addition to industry- and firm-specific characteristics, we control for the fixed effect of the type of agents who first detected the fraud. We also control for the timing of fraud detection by including the fixed effect of the year of detection. Columns 5–8 of Table 3 report the results. We observe that the additional control variables do not alter our findings. Both the

dummy variable for lobbying activities and the average annual lobbying expenses continue to be positively and significantly related to a longer time to detect fraud in EW and VW regressions.

B. Survival Analysis

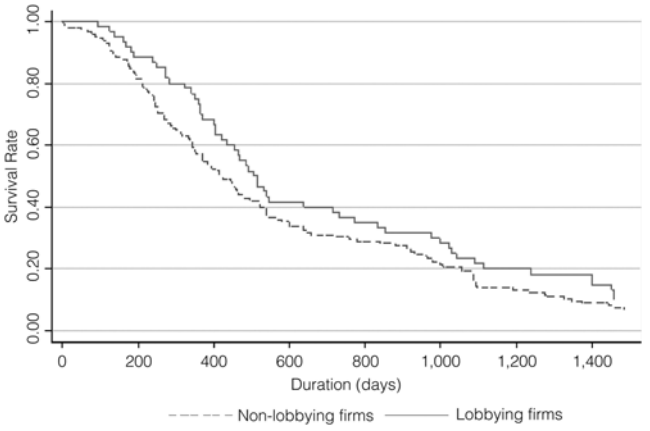
Table 3 shows that it takes longer to detect fraud by firms that are involved in lobbying activities. In this subsection we use survival analysis and explicitly examine whether fraudulent firms that lobby have a higher rate of evading detection than fraudulent firms that do not lobby.

We first estimate the proportion of fraudulent firms evading detection up until a given time and plot the real survival curves using the Kaplan-Meier method, a nonparametric approach that estimates a survivor function without covariates and computes the conditional survival probability. Figure 1 presents the plot based on Kaplan-Meier survival estimates for fraudulent firms' rate of evading detection. Throughout the entire fraudulent period, the solid line for lobbying firms is above the dashed line for nonlobbying firms. This suggests that in any given day, lobbying firms have a higher rate of evading detection than nonlobbying firms.

FIGURE 1

Survival Estimates of Fraudulent Firms: Lobby versus Not Lobby

Figure 1 presents the plot based on Kaplan-Meier survival estimates for fraudulent firms' rate of evading detection during the sample period of 1998–2004. The solid line is the probability of evading detection up until a given time for fraudulent firms that lobby. The dashed line is the probability of evading detection up until a given time for fraudulent firms that do not lobby.



Next, we examine the effect of lobbying on the probability of evading fraud detection by taking into account other factors that could potentially affect the probability of evading fraud detection at a given time, such as size and industry effect. We estimate 2 regression models for the survival analysis: Cox's proportional hazard model and Weibull regression.[15] In each of the regression specifications,

[15]Cox regression is a widely used semiparametric method for survival analysis. Unlike the Kaplan-Meier approach, it estimates a survivor function with covariates using a proportional hazard model,

the dependent variable is the hazard rate of being detected for fraud. Our variables of interest are the dummy variable for lobbying activities and average lobby spending (in millions of dollars), respectively. In addition to controlling for firm size, book-to-market ratio, and the Fama-French 10-industry fixed effect, we include the fixed effects of different types of agents who detect the fraud and fraud motivation based on the classifications in Dyck et al. (2010).[16]

Columns 1–4 of Table 4 present the results from the Cox regression. All the coefficients are reported in the unexponentiated form. Column 1 shows that the coefficient associated with the dummy variable for lobbying activities is negative and significant, suggesting that lobbying is associated with a lower hazard rate of being detected for fraud. Column 2 presents the results of the Cox regression with additional controls for the fixed effects of fraud motivation and type of agents who detect the fraud. We observe the same result: Lobbying reduces the hazard rate of fraud being detected. Columns 3 and 4 use average annual lobbying expenses

TABLE 4

Do Lobbying Firms Evade Detection Longer?

The sample period is 1998–2004. The dependent variable is the hazard ratio for Cox regression (columns 1–4) and for Weibull regression (columns 5–8). Dummy variable for lobbying activities is equal to 1 if the firm is involved in lobbying activities during the sample period, and 0 otherwise. Average lobby spending is the annual average lobbying expenses (in millions of dollars) a firm has incurred during the sample period. Size is the log value of market value of equity in the year before fraud detection. Book-to-market is the book-to-market value of equity in the year before fraud detection. Type of detecting agents is 1 of the 8 categories of the parties who first detected a fraud: regulators, analysts, blockholders, employees and other stakeholders, firm, insiders, media, and professional services. Fraud motivation is 1 of the 6 motivations for fraud: personal profit, selling off shares of division or firm, merger/acquisition, organic growth, industry downturn, and firm value enhancement. The industries are defined according to the Fama-French 10 industries. The coefficients reported are in unexponentiated form. Standard errors are in parentheses. ***, **, and * indicate significance at the 1%, 5%, and 10% levels, respectively.

	Cox Regression				Weibull Regression			
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Dummy for lobbying activities	–0.63*** (0.20)	–0.69*** (0.21)			–0.68*** (0.20)	–0.77*** (0.21)		
Average lobby spending			–0.12* (0.06)	–0.14** (0.07)			–0.12* (0.06)	–0.17** (0.07)
Book-to-market	0.03 (0.05)	0.01 (0.05)	0.02 (0.04)	–0.00 (0.04)	0.03 (0.05)	0.00 (0.05)	0.02 (0.04)	–0.00 (0.05)
Size	0.14*** (0.05)	0.13** (0.06)	0.10** (0.05)	0.11** (0.06)	0.15*** (0.05)	0.15*** (0.06)	0.12** (0.05)	0.14** (0.06)
Industry fixed effect	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Detection agent fixed effect	No	Yes	No	Yes	No	Yes	No	Yes
Fraud motivation fixed effect	No	Yes	No	Yes	No	Yes	No	Yes
No. of obs.	192	192	192	192	192	192	192	192
Prob. $> \chi^2$	0.00	0.00	0.02	0.00	0.00	0.01	0.03	0.00

instead of the lobbying dummy variable as the key independent variable. Our evidence suggests that the amount of lobbying expense also reduces the hazard rate of being detected for fraud. After we account for detection type and fraud

which does not require a specific underlying probability distribution but assumes the hazard ratio to be constant. Weibull regression specifies the Weibull distribution, which does not require failure rates to remain constant but allows them to change smoothly over time.

[16]Dyck et al. (2010) classify each fraud into 1 of the 6 motivations for fraud: personal profit, selling off shares of a division or firm, merger/acquisition, organic growth, industry downturn, and firm value enhancement. They show that fraud detection is associated with the type of detecting agents and the nature of the fraud.

motivation fixed effects, the coefficient associated with average lobbying expenses is significant at least at the 10% level.

Columns 5–8 of Table 4 report the results from the Weibull regression. The results are similar to those from the Cox regression: Lobbying activities reduce firms' hazard rate of being detected, and the more money firms spend on lobbying, the lower the hazard rate.

To summarize, our results suggest that compared to fraudulent firms that do not lobby, fraudulent firms that are involved in lobbying activities have a higher probability of avoiding being detected for fraud.

When analyzing the effect of corporate lobbying, one limitation is that due to data restrictions, we are unable to explore other aspects of corporate fraud besides fraud detection, such as the length of litigations and settlement arrangements, which could also be affected by lobbying activities. Another limitation is that we do not observe frauds that were not caught during the sample period, and we cannot directly test whether lobbying affects the probability of fraud detection. However, by restricting our attention to large firms' frauds, this problem is less severe: Due to intense public scrutiny, the ability to sue based on previous misconduct, and the strong incentives to sue by plaintiff lawyers, there are fewer undetected frauds for large firms (Dyck et al. (2010)). In addition, we can view frauds that were not caught as firms having very long fraud durations that exceed our sample period. Our results can then be seen as a subsample analysis with detection time truncated at 2004. The 3rd limitation is the potential omitted variable problem, since some potential difference between lobbying firms and nonlobbying firms can affect fraud detection. While our controls for size, book-to-market, and industry fixed effect in the analyses help to mitigate the impact of potential omitted variables, it is still difficult to fully address this concern without a good instrument variable that affects only lobbying but has no effect on fraud detection during the sample period.

C. Type of Detecting Agents

Dyck et al. (2010) identify the economic agents that first detected fraud for each case in their sample. They classify the type of agents into 8 categories: regulators, analysts, blockholders, employees and other stakeholders, firm, insiders, media, and professional services. For example, a fraud is defined as being detected by a regulator if the agent who discovered fraud is an industry regulator or is from a federal investigative agency, trade organization, or the SEC.[17]

So far, we have shown that corporate lobbying is associated with a longer period to uncover fraud and a higher probability of evading fraud detection. We now

[17]A fraud is considered as detected by a *blockholder* if the agent who discovered the fraud is an equity holder, a bank, or a short seller. A fraud is considered as detected by *employees and other stakeholders* if the agent who brought the fraud to light is an employee, supplier, client, or competitor. Similarly, an agent who uncovered a fraud belongs to *professional services* if the agent is an auditor, a law firm, a rating agency, or an agent who provides other professional services. In addition, a fraud detector is classified as an *insider* if he or she is a board member, new manager, officer, or director. For a description of this classification system and the identity of each fraud detector, see Dyck et al. (2010).

examine economic agents upon which lobbying activities have the most impact. We conjecture that lobbying has a strong effect on detection by regulators since it mainly targets government agents.

Panel A of Table 5 reports the fraction of frauds detected by each type of economic agent classified in Dyck et al. (2010). Overall, 34 out of 205 fraud cases, or 17% of frauds in our sample, are detected by regulators. We then break down our fraud sample into the lobbying subsample and the nonlobbying subsample, based on whether or not a sample firm is engaged in lobbying activities. We observe that the lobbying subsample has a lower fraction of frauds detected by regulators. In the nonlobbying subsample, 19% of frauds were caught by regulators. Based on the number of frauds detected, regulator is ranked next to the firm (22%) as the most effective agent in discovering corporate fraud. For the lobbying subsample, however, 12% of frauds were caught by regulators, representing a 38% decrease in detection rate by regulator compared to the nonlobbying subsample. Regulators

TABLE 5

What Type of Detection Is Reduced by Corporate Lobbying?

The sample period is 1998–2004. A lobbying firm is defined as a fraudulent firm that is engaged in lobbying activities in the sample period, and a nonlobbying firm is a fraudulent firm that is not engaged in lobbying activities. Panel A reports the frequency of different type of agents that discovered fraud for lobbying firms and nonlobbying firms, respectively. Fraud detectors are entities that first uncovered the fraud and are based on the classifications of Dyck et al. (2010): regulators, analysts, blockholders, employees and other stakeholders, firm, insiders, media, and professional services. Rank is the ranking based on the number of frauds detected by a particular agent among all 8 types. Panel B reports the results from cross-sectional linear probability regressions for each type of fraud detectors. The dependent variable is a dummy variable equal to 1 if the fraud is detected by a particular type of party, and 0 otherwise. Dummy variable for lobbying activities is equal to 1 if a firm is engaged in lobbying activities during the sample period, and 0 otherwise. Size is the log value of asset in the year before fraud detection. The industry classification of each company is defined by the Fama-French 10 industries. Standard errors are reported in parentheses. ***, **, and * indicate significance at the 1%, 5%, and 10% levels, respectively.

Panel A. Fraud Detecting Agents and Frequency of Detection

	Nonlobbying Firms			Lobbying Firms		
Fraud Detectors	Count	% of Total	Rank	Count	% of Total	Rank
Regulators	26	18.98%	2	8	11.76%	4
Analysts	12	8.76%	6	10	14.71%	3
Blockholders	5	3.65%	8	1	1.47%	8
Employees and other stakeholders	21	15.33%	3	7	10.29%	6
Firm	30	21.90%	1	15	22.06%	1
Insiders	16	11.68%	5	8	11.76%	4
Media	7	5.11%	7	13	19.12%	2
Professional services	20	14.60%	4	6	8.82%	7
Total	137	100%		68	100%	

Panel B. Cross-Sectional Linear Probability Regression

	Regulators (1)	Media (2)	Firm (3)	Professional Services (4)	Insiders (5)	Blockholders (6)	Employees and Other Stakeholders (7)	Analysts (8)
Dummy for lobbying activities	–0.14*	0.01	–0.02	0.02	0.06	–0.01	0.05	0.03
	(0.08)	(0.08)	(0.09)	(0.07)	(0.07)	(0.03)	(0.07)	(0.08)
Size	0.03	0.03*	0.02	0.02	–0.06**	0.00	–0.04*	0.01
	(0.03)	(0.02)	(0.02)	(0.02)	(0.03)	(0.01)	(0.02)	(0.02)
Constant	0.00	–0.20	0.07	–0.02	0.72***	0.02	0.43**	–0.01
	(0.22)	(0.15)	(0.21)	(0.16)	(0.24)	(0.05)	(0.20)	(0.14)
Industry fixed effect	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
No. of obs.	159	159	159	159	159	159	159	159
R^2	0.14	0.05	0.03	0.09	0.10	0.05	0.06	0.07

only rank 4th among all 8 types of parties, falling behind firm, media, and analysts in terms of the fraction of frauds being detected.

Next, we regress the dummy variable of whether the fraud is detected by a particular type of agent against the dummy variable for lobbying activities, controlling for size and industry fixed effect. Panel B of Table 5 reports the results from the cross-sectional linear probability regression. Column 1 of Panel B presents the results for whether the fraud is detected by regulators. We observe that the coefficient associated with the dummy variable for lobbying activities is negative (–0.14) for regulators ($p = 0.068$). This indicates that controlling for industry and firm size, lobbying is associated with a lower probability of a fraud being detected by regulators.

The remaining columns of Panel B of Table 5 present the results of the regressions testing whether lobbying affects the probability of being detected by other types of monitors. We do not observe a significant relation between lobbying and fraud detection by other types of economic agents, as none of the coefficients associated with the dummy variable for lobbying activities is significant.

V. Do Fraudulent Firms Spend More on Lobbying Expenses?

Our analyses based on the fraud sample have shown that there is a difference in fraud detection between firms that are (or are not) involved in lobbying activities. If lobbying helps corporations to conceal fraud and evade detection, then we should also expect to observe a link between the amount of lobby spending and corporate fraud. In this section, we shift our focus to the lobbying sample; we investigate whether fraudulent firms spend more on lobbying than nonfraudulent firms, and whether they spend more on lobbying during the fraudulent periods than nonfraudulent periods.

A. Fraudulent versus Nonfraudulent Firms

We first explore whether fraudulent firms spent more on lobbying expenses than nonfraudulent firms in a panel regression framework. For our lobbying sample, we define a firm-year observation as being within a "fraudulent period" if the time period is later than the time when fraud took place and earlier than the time when the fraud was detected, and as being within a "nonfraudulent period" otherwise. We define a firm-year observation as a "fraudulent firm" if a firm is in its fraudulent period, and otherwise as a "nonfraudulent firm."

Panel A of Table 6 presents the summary statistics of lobbying expenses within the lobbying sample. On average, a nonfraudulent firm spends $1.97 million on lobbying each year over the sample period, while a fraudulent firm spends $3.48 million, a 77% difference. The difference is also statistically significant, as the p-value from the t-test based on unequal variance is 0.00.

Next, in a panel regression, we regress annual lobbying expenses against the dummy variable for fraud, controlling for size, book-to-market of equity ratio, as well as industry and year fixed effects. The dummy variable for fraud is equal to 1 if a firm is in its fraudulent period, and 0 otherwise. Since our tests are based on

TABLE 6

Do Fraudulent Firms Spend More on Lobbying Expenses?

The sample contains firms that were involved in lobbying activities during the period 1998–2004. We define a firm-year observation as in a fraudulent period if the time period is later than the time when fraud took place and earlier than the time when the fraud was detected and as in a nonfraudulent period otherwise. We define a firm-year observation as a fraudulent firm if a firm is in its fraudulent period, and otherwise as a nonfraudulent firm. A firm's annual lobby spending is the sum of its midyear and year-end lobbying expenditures. Panel A of Table 6 compares average annual lobby spending (in thousands of dollars) between fraudulent firms and nonfraudulent firms. The *t*-test of difference in average annual lobbying expenses between fraudulent and nonfraudulent firms is based on uneven variance. Panel B reports the results from multivariate panel regression. The dummy variable for fraud is a variable equal to 1 if a firm is in its fraudulent period, and 0 otherwise. Size is the log value of market value of equity in the year before fraud detection. Book-to-market is the book-to-market value of equity in the year before fraud detection. The industry classification of each company is defined by the first 2 digits of the SIC codes. Robust standard errors clustered at firm-level are in parentheses. ***, **, and * indicate significance at the 1%, 5%, and 10% levels, respectively.

Panel A. Annual Lobby Spending between Fraudulent Firms and Nonfraudulent Firms

	Mean	Median	25th Percentile	75th Percentile	Standard Deviation	*N*
Fraudulent lobbying firms	3,477	2,870	960	5,320	2,912	85
Nonfraudulent lobbying firms	1,965	1,158	680	2,320	2,276	1,968
t-test: fraudulent vs. nonfraudulent lobbying firms				$p = 0.00$		

Panel B. Multivariate Panel Regression

	Full Sample	Assets ≥ 750M
Dummy for fraud	457.08***	472.04***
	(159.66)	(160.71)
Book-to-market ratio	–2.17*	–2.55**
	(1.13)	(1.23)
Size	292.24***	307.96***
	(38.23)	(40.60)
Constant	–1,613.77***	–1,761.19***
	(347.27)	(376.17)
Industry fixed effect	Yes	Yes
Year fixed effect	Yes	Yes
No. of obs.	1,741	1,679
R^2	0.39	0.41

the entire lobbying sample, which is much larger than the fraud sample, we are able to use a more refined industry control in which industry classification is based on a sample firm's first 2 digits of the Standard Industrial Classification (SIC) code. Our results remain unchanged if we use the Fama-French 10 industries. All the standard errors in regressions are clustered at the firm level.

Panel B of Table 6 reports the panel regression results. Column 1 shows that for the entire lobbying sample, the coefficient for the fraud dummy variable is positive (457.08) and highly significant. This indicates that each year, an average fraudulent firm spends $457,080 more on lobbying than a nonfraudulent firm of similar size and book-to-market ratio, within the same industry.

Since Dyck et al. (2010) limit their sample to frauds with assets of at least $750 million to screen out frivolous lawsuits, we reestimate the above regression, restricting the lobbying sample to only include firms with annual assets exceeding $750 million. This restriction results in little reduction (3.4%) in the size of the lobbying sample, as a majority of firms in our lobbying sample are large firms. We observe similar results from column 2 of Panel B in Table 6: Large fraudulent firms spend $472,040 more on lobbying than large nonfraudulent firms every year.

As a robustness check, we also conduct a cross-sectional version of the above test. In the cross-sectional regression, a firm is defined as a fraudulent firm if it

is detected for fraud during the entire sample period, and as a nonfraudulent firm otherwise. The results are similar to those from the panel regressions and hence are not reported.

B. Does Change in Fraud Status Affect Lobbying Expenses?

Table 6 provides evidence that fraudulent firms spend significantly more on lobbying than nonfraudulent firms during the period of 1998–2004. Nevertheless, it is possible that other factors may affect both lobby spending and corporate fraud. To mitigate the problem of omitted variables, we examine the time-series variation in the lobbying expenses of fraudulent firms. We ask the question: Do firms spend more on lobbying during their fraudulent periods than nonfraudulent periods?

In our fraud sample, there are 57 firms that are involved in lobbying activities during the period 1998–2004. For each of these fraudulent firms, we calculate its annual lobbying expenses by summing its midyear and year-end lobbying expenditures. If we do not observe its lobbying information in a given year, we assume the lobbying expense in that year is 0.

Panel A of Table 7 compares the annual lobbying expenses of fraudulent firms between their fraudulent and nonfraudulent periods. On average, a fraudulent firm spends \$1.61 million on lobbying each year during its nonfraudulent period, but it spends \$2.08 million (29% more) on lobbying each year during its fraudulent period.[18] The difference is statistically significant ($p = 0.04$).

Panel B of Table 7 reports the results of multivariate panel regression. In column 1, we regress annual lobbying expenses on the dummy variable for fraud, controlling for firm and year fixed effects. Adding firm fixed effect absorbs all the cross-sectional variations and allows us to examine time-series variation separately. By controlling for year fixed effect in addition to firm fixed effect, all the time-series variations in lobbying expenses come from the difference between fraudulent period and nonfraudulent period. The results indicate that an average firm spends significantly more (an additional \$446,810) each year during its fraudulent period than nonfraudulent period.

Next, we regress the change of annual lobbying expenses on the change in fraud status. For a given year t, we define "change in lobby spending" as the difference in a fraudulent firm's lobbying expenses between year t and year $t - 1$. "Change in fraud status" is a dummy variable equal to 1 when a firm moves from a nonfraudulent to fraudulent period, -1 when it moves from a fraudulent to nonfraudulent period, and 0 otherwise.

Column 2 of Panel B in Table 7 reports the results based on the above difference-in-difference analysis. We observe that controlling for firm fixed effect and year fixed effect, a change in fraud status is positively associated with the change in lobby spending. This implies that after a firm commits fraud, it

[18]The results reported in Table 6 are based on the time-series analyses within the fraud sample, which involves observations in the periods when the lobbying expenses of a fraudulent firm are 0. It differs from the sample in Table 7, which consists of all lobbying firms and does not contain any firm-year observations with 0 lobbying expenses.

TABLE 7

Do Fraudulent Firms Spend More on Lobbying during Fraudulent Period?

In Panel A of Table 7, the sample contains fraudulent firms that were involved in lobbying activities during the sample period 1998–2004. If a fraudulent firm lobbies in a particular year, its annual lobbying expenses are computed by summing its midyear and year-end lobbying expenditures; if it does not lobby in a particular year, we treat its lobbying expenditure in that year as 0. In Panel B the dependent variable is annual lobby spending (column 1) and change in lobby spending (column 2). Change in lobby spending is defined as the change in annual lobbying expenses (in thousands of dollars) from the previous year. The dummy variable for fraud is equal to 1 if a firm is in its fraudulent period, and 0 otherwise. Change in fraud status is equal to 1 when a firm moves from a nonfraudulent period to a fraudulent period, −1 when a firm moves from a fraudulent period to a nonfraudulent period, and 0 otherwise. Robust standard errors clustered at firm-level are in parentheses. ***, **, and * indicate significance at the 1%, 5%, and 10% levels, respectively.

Panel A. Annual Lobby Spending for Fraudulent Firms

Period	Mean	Median	25th Percentile	75th Percentile	Standard Deviation	*N*
Fraudulent period	2,082	772	0	3,148	2,824	142
Nonfraudulent period	1,610	660	0	2,320	2,367	266

Panel B. Multivariate Panel Regression

	Annual Lobby Spending (1)	Change in Lobby Spending (2)
Dummy for fraud	446.81***	
	(126.25)	
Change in fraud status		464.01***
		(133.23)
Constant	1,991.31***	140.18
	(175.53)	(155.17)
Firm fixed effect	Yes	Yes
Year fixed effect	Yes	Yes
No. of obs.	408	357
R^2	0.79	0.16

increases its lobbying expenses significantly; when a firm moves from a fraudulent to nonfraudulent period, it decreases its lobby spending.

To summarize, Table 6 indicates that among firms that are involved in lobbying activities, fraudulent firms spend significantly more on lobbying expenses than nonfraudulent firms. Table 7 indicates that fraudulent firms that lobby spend more on lobbying during their fraudulent periods than nonfraudulent periods. These findings thus provide evidence in support of our previous results that corporate lobbying affects fraud detection.

VI. Welfare Consequences of Delay in Fraud Detection

Various studies have documented the negative welfare consequences associated with corporate frauds (e.g., Palmrose and Scholz (2004), Karpoff, Lee, and Martin (2008), Kedia and Philippon (2009), Gande and Lewis (2009), and Goldman, Peyer, and Stefanescu (2011)). The recent legislative and regulatory changes, such as the Sarbanes-Oxley Act of 2002 in response to the emergence of corporate frauds, suggest that the existence and continuation of such frauds constitute costs to investors and the general public. Our finding that fraudulent firms engaged in lobbying activities are able to evade detection significantly longer suggests that a delay in fraud detection increases such costs. While there are many ways to identify and measure these costs, a comprehensive analysis of the costs and benefits associated with corporate fraud is beyond the scope of this paper.

Instead, in this section we focus on how delay in detection affects the personal gains of managers and the resource misallocation by fraudulent firms.[19]

Researchers have documented a sharp decline in share price when fraud surfaces (e.g., Karpoff, Lee, and Vendrzyk (1999)). Since it takes longer to discover fraud for firms that are engaged in lobbying activities, one party that can potentially benefit from the delay in detection is the managers of these firms, who would have more time to sell their shares before the decline in the value of the firm occurs.

Kedia and Philippon (2009) also document evidence that in order to pool with high productivity firms, low productivity firms invest and hire excessively during periods of suspicious accounting. As a result, their overexpansion distorts the allocation of economic resources in the economy. A natural extension from Kedia and Philippon is that the longer the fraudulent period lasts, the greater the distortion in resource allocation.

In what follows, we investigate how delay in fraud detection affects managers' personal gains and firms' expansions. Specifically, we analyze the trading activities of insiders, as well as investment and hiring behaviors of fraudulent firms, before, during, and after the fraudulent periods, respectively. Similar to Kedia and Philippon (2009), we define "before fraudulent period" ("after fraudulent period") as a 2-year period prior to the year when fraud is committed (after the year when fraud is detected).

A. Insider Trading during Fraudulent Period

We collect insider trading information for fraudulent firms from the Thomson Financial Insider Trading Database. For each firm, we follow Peng and Röell (2008) and calculate the aggregate dollar values of sales and purchases of the firm's shares by insiders (such as chief executive officers (CEOs), chief operating officers (COOs), chief financial officers (CFOs), presidents, directors, and chairmen of the board).

We compare insider trading activities between fraudulent firms that are involved in lobbying activities and those that are not. With lobbying activities leading to a delay in fraud detection, insiders from fraudulent firms that lobby should be able to sell significantly more shares during a fraudulent period than those from firms that do not. On the other hand, since the delay in fraud detection occurs only during a fraudulent period, lobbying activities should not affect the difference in insider trading during nonfraudulent periods.

We first regress the log of cumulative dollar value of insider sales of the firms' shares against the dummy variable for lobbying activities over each of the 3 periods. Columns 1–3 of Table 8 report the regression results with industry and detection year fixed effects (FE). We observe that the coefficient associated with the dummy variable for lobbying activities is positively and significantly related to insider sales during the fraudulent period (column 2). This indicates that controlling for industry, detection year, firm size, and book-to-market ratio,

[19]We thank the referee for suggesting the tests for resource misallocation.

TABLE 8

Welfare Consequences of Delay in Fraud Detection (insider trading)

Insider trading data are from the Thomson Financial Insider Trading Database. During is the time within a fraudulent period, where a fraudulent period is the period after a fraud is committed and before it is detected. Before and after refer to a 2-year period prior to, and a 2-year period after the fraudulent period, respectively. The dependent variable is the log of cumulative dollar sales of shares by insiders over each of the 3 periods (columns 1–4), and the log of cumulative dollar purchases of shares by insiders over each of the 3 periods (columns 5–8). Dummy variable for lobbying activities equals 1 if a firm is engaged in lobbying activities during the sample period, and 0 otherwise. Fraud duration is the number of days within a fraudulent period. Predicted fraud duration is the predicted value of fraud duration when we regress fraud duration against the dummy variable for lobbying activities. The industries are defined according to the Fama-French 10 industries. Standard errors are in parentheses. ***, **, and * indicate significance at the 1%, 5%, and 10% levels, respectively.

	Insider Sales				Insider Purchase			
	Before FE (1)	During FE (2)	After FE (3)	During 2SLS (4)	Before FE (5)	During FE (6)	After FE (7)	During 2SLS (8)
Dummy for lobbying activities	0.05	1.86*	0.36		–0.79	0.78	–0.45	
	(0.77)	(0.98)	(0.76)		(0.61)	(0.64)	(0.57)	
Predicted fraud duration				0.01*				0.00
				(0.01)				(0.00)
Book-to-market	–3.36***	–0.37	–0.41	–0.37	–0.68	0.34	–0.16	0.34
	(0.86)	(0.39)	(0.27)	(0.39)	(0.69)	(0.26)	(0.20)	(0.26)
Size	0.40*	0.55*	0.62***	0.55*	0.45**	0.47**	0.60***	0.47**
	(0.22)	(0.29)	(0.23)	(0.29)	(0.17)	(0.19)	(0.17)	(0.19)
Constant	13.63***	9.95***	10.64***	4.14	12.21***	10.34***	9.69***	7.91***
	(1.82)	(2.61)	(2.04)	(2.80)	(1.45)	(1.70)	(1.52)	(1.83)
Industry fixed effect	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Detection year fixed effect	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
No. of obs.	175	170	158	170	175	170	158	170
R^2	0.31	0.27	0.26	0.27	0.19	0.22	0.22	0.22

the aggregate insider sales of shares during the fraudulent period are significantly more for firms that are involved in lobbying activities than for firms that are not.

By contrast, the dummy variable for lobbying activities is not significant for either the pre-fraud period (column 1) or the post-fraud period (column 3). There is no significant difference in insider sales between firms that lobby and those that do not lobby before fraud is committed, nor after fraud is detected. These results suggest that while lobbying activities are associated with a delay in fraud detection, which allows insiders to sell more shares, the delay itself, and therefore the effect of lobbying activities, is limited only to the fraudulent period.

Next, we utilize a 2-stage least squares (2SLS) regression approach to investigate whether the delay in fraud detection is the underlying factor affecting the difference in insider sales during the fraudulent period between lobbying firms and nonlobbying firms. In the first stage, we regress duration of fraud against the dummy variable for lobbying activities and compute the predicted fraud duration, which gives us duration of fraud driven by the lobbying activities of fraudulent firms. In the second stage, we include the predicted fraud duration in the regression of insider sales over the fraudulent period.

Column 4 of Table 8 reports the results. We find that predicted fraud duration is positively related to cumulative insider sales of firms' shares, and the relationship is significant at the 10% level ($p = 0.082$). We interpret this as evidence consistent with the argument that delay in fraud detection, arising from

fraudulent firms' lobbying activities, allows insiders to sell more of their shares before the decline in share value once the fraud is detected.

Instead of insider sales, we next repeat the same set of analyses for insider purchases of the shares of fraudulent firms. Columns 5–8 of Table 8 report the results. Unlike insider sales, we observe no significant difference in cumulative insider purchases during the fraudulent period between lobbying firms and nonlobbying firms, as neither the dummy variable for lobbying activities, nor the predicted fraud duration is significantly related to insider purchases over this period (columns 6 and 8). Despite a longer fraudulent period for firms that are involved in lobbying activities, insiders of these firms do not purchase significantly more shares than insiders in firms that do not lobby.

To summarize, compared to insiders of firms that do not lobby, those from firms that are involved with lobbying activities sell more, but do not purchase more, shares during the fraudulent period. These results provide supporting evidence that delay in fraud detection benefits managers of fraudulent firms by allowing them to profit from selling more shares before fraud is detected.

B. Overinvestment

In this subsection we investigate the effect of delay in detection on resource misallocation by fraudulent firms. Following Kedia and Philippon (2009), we measure a firm's investment activities by computing its capital expenditure, scaled by net plant, property, and equipment (PPE), during its fraudulent period as well as pre- and post-fraud periods. We measure its hiring activities by computing the employment growth rate over each of the 3 periods.

We employ an approach similar to the one used for insider trading analysis. Table 9 reports the results from fixed effect regression and 2SLS analysis for capital expenditure (columns 1–4) and for employment growth (columns 5–8). When examining the direct link between lobbying activities and the distortion of recourse allocation, Table 9 reveals that during the fraudulent period, the coefficient for the dummy variable for lobbying activities is positively and significantly related to capital expenditure (column 2) and employment growth (column 6). This suggests that compared to firms that do not lobby, firms involved in lobbying activities invest more in projects and hire more employees during their fraudulent periods.

Again, since the delay in fraud detection occurs only during the fraudulent period, the effect of lobbying activities should be limited to this period as well. Table 9 confirms that during nonfraudulent periods, there is no significant difference in either capital spending or employment growth between the 2 types of fraudulent firms. The coefficient for the dummy variable for lobbying activities is not significant before fraud is committed (columns 1 and 5), nor is it significant after fraud is detected (columns 3 and 7).

Last, in the 2SLS regression analysis, we investigate whether delay in fraud detection contributes to the difference in resource misallocation between lobbying firms and nonlobbying firms. We first regress duration of fraud against the dummy variable for lobbying activities, and then we include the predicted fraud duration in the 2SLS regression of capital spending and employment growth. Columns 4

TABLE 9

Welfare Consequences of Delay in Fraud Detection (overinvestment)

Capital expenditure and employment data are from the Compustat Database. During is the time within a fraudulent period, where a fraudulent period is the period after a fraud is committed and before it is detected. Before and after refer to a 2-year period prior to, and a 2-year period after the fraudulent period, respectively. The dependent variable is capital expenditure scaled by net property, plant, and equipment over each of the 3 periods (columns 1–4), and employment growth over each of the 3 periods (columns 5–8). Employment growth is computed as 100 times the cumulative employment growth rate in a given period. Dummy variable for lobbying activities equals 1 if a firm is engaged in lobbying activities during the sample period, and 0 otherwise. Fraud duration is the number of days within the fraudulent period. For columns 4 and 8, predicted fraud duration is the predicted value of fraud duration when we regress fraud duration on the dummy variable for lobbying activities. The industries are defined according to the Fama-French 10 industries. Standard errors are in parentheses. ***, **, and * indicate significance at the 1%, 5%, and 10% levels, respectively.

	Capital Expenditure				Employment Growth			
	Before FE	During FE	After FE	During 2SLS	Before FE	During FE	After FE	During 2SLS
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Dummy for lobbying activities	6.74	29.99***	0.23		39.08	48.72*	1.71	
	(5.12)	(10.55)	(5.54)		(32.90)	(28.79)	(6.83)	
Predicted fraud duration				0.15***				0.25*
				(0.05)				(0.15)
Book-to-market	–20.01**	6.60	6.91	6.60*	–53.67	10.23	–13.30***	10.23
	(8.81)	(4.79)	(6.06)	(3.94)	(48.94)	(12.58)	(3.51)	(12.58)
Size	–9.87***	–9.26***	–0.69	–9.26***	–27.65***	–8.35	–2.28	–8.35
	(1.68)	(2.85)	(1.66)	(2.70)	(8.74)	(8.61)	(2.00)	(8.61)
Constant	129.01***	114.43***	33.93**	25.07	317.88***	102.16	24.18	–42.99
	(16.57)	(27.30)	(14.71)	(25.02)	(73.35)	(75.98)	(18.25)	(79.81)
Industry fixed effect	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Detection year fixed effect	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
No. of obs.	173	189	167	189	173	189	167	189
R^2	0.51	0.35	0.28	0.35	0.14	0.10	0.20	0.10

and 8 of Table 9 show that predicted fraud duration, which captures fraud duration driven by lobbying activities, is significantly and positively related to capital expenditure and employment growth during a fraudulent period.

The results in Table 9 indicate that the effect of delay in fraud detection is not limited to personal gains for managers of fraudulent firms through their insider selling. Since fraudulent firms tend to invest and hire more aggressively during their fraudulent periods (Kedia and Philippon (2009)), any delay in fraud detection also contributes to a greater distortion in the allocation of economic resources.

Our findings also shed light on the weak incentive of corporate insiders to blow the whistle on fraudulent activities of their firms, as documented in Dyck et al. (2010). The presence of private benefits of delaying fraud detection accrued to insiders and employees (through higher investment expansion and employment growth) helps explain the negative consequences faced by corporate whistle-blowers. By bringing the fraud to light and removing the excess cash that otherwise would have been spent by the firm, insiders' whistle-blowing imposes clear short-term costs on executives and their colleagues.

VII. Conclusions

This study explores the connection between corporate lobbying activities and fraud detection. Using lobbying expense data from 1998 to 2004, we provide

evidence that spending on lobbying makes a significant difference in fraud detection: Firms involved in lobbying have a significantly lower hazard rate of being detected for fraud and are able to evade detection 117 days longer than firms not involved in lobbying. Fraudulent firms involved in lobbying activities are 38% less likely to be detected by regulators. In addition, fraudulent firms spend 77% more on lobbying expenses than nonfraudulent firms, and they spend 29% more on lobbying during their fraudulent than nonfraudulent periods. The delay in detection leads to a greater distortion in resource allocation stemming from more aggregative investment and hiring by firms during their fraudulent periods. It also allows managers to sell more of their shares.

A majority of the existing studies on the effect of political connections have focused on asset prices. Our paper contributes to this literature by providing evidence on how political connections may affect corporate governance in the context of fraud detection. It also contributes to the literature on corporate fraud by identifying a new factor, corporate lobbying, that is significantly associated with fraud detection. Last, while the law and finance literature has recognized the important role of the legal system for corporate governance, the legal/regulation system is usually treated as exogenous in empirical international studies. Since lobbying activities are known to affect legislation, our evidence that lobbying has consequences on corporate governance raises the question of the validity of the exogenous assumption of the legal system in international studies.

We also wish to point out that our results should not be interpreted as evidence of the inefficiency of corporate lobbying in general. In fact, lobbying is one of the main means by which various groups promulgate their views to legislators. Just as a corrupt election does not invalidate an entire voting system, our evidence in this study imposes no implication that we should ban corporate lobbying. Instead, our findings shed light on the recent debate about whether to improve the transparency in corporate political spending. By providing evidence that political spending does affect the welfare of investors, our study suggests a need for more transparency in corporate political spending.

References

Aggarwal, R.; F. Meschke; and T. Wang. "Corporate Political Contributions: Investment or Agency?" Working Paper, University of Minnesota (2009).

Agrawal, A., and S. Chadha. "Corporate Governance and Accounting Scandals." *Journal of Law and Economics,* 48 (2005), 371–406.

Agrawal, A., and C. R. Knoeber. "Do Some Outside Directors Play a Political Role?" *Journal of Law and Economics,* 44 (2001), 179–198.

Baron, D. P. "Review of Grossman and Helpman's Special Interest Politics." *Journal of Economic Literature,* 40 (2002), 1221–1229.

Beasley, M. S. "An Empirical Analysis of the Relation between the Board of Director Composition and Financial Statement Fraud." *Accounting Review,* 71 (1996), 443–465.

Burns, N., and S. Kedia. "The Impact of Performance-Based Compensation on Misreporting." *Journal of Financial Economics,* 79 (2006), 35–67.

Claessens, S.; E. Feijen; and L. Laeven. "Political Connections and Preferential Access to Finance: The Role of Campaign Contributions." *Journal of Financial Economics,* 88 (2008), 554–580.

Cooper, M. J.; H. Gulen; and A. V. Ovtchinnikov. "Corporate Political Contributions and Stock Returns." *Journal of Finance,* 65 (2010), 687–724.

Dechow, P. M.; R. G. Sloan; and A. P. Sweeney. "Causes and Consequences of Earnings Manipulation: An Analysis of Firms Subject to Enforcement Actions by the SEC." *Contemporary Accounting Research,* 13 (1996), 1–36.

Dyck, A.; A. Morse; and L. Zingales. "Who Blows the Whistle on Corporate Fraud?" *Journal of Finance,* 65 (2010), 2213–2253.

Efendi, J.; A. Srivastava; and E. P. Swanson. "Why Do Corporate Managers Misstate Financial Statements? The Role of Option Compensation and Other Factors." *Journal of Financial Economics,* 85 (2007), 667–708.

Faccio, M.; R. W. Masulis; and J. J. McConnell. "Political Connections and Corporate Bailouts." *Journal of Finance,* 61 (2006), 2597–2635.

Faccio, M., and D. C. Parsley. "Sudden Deaths: Taking Stock of Geographic Ties." *Journal of Financial and Quantitative Analysis,* 44 (2009), 683–718.

Fan, J. P. H.; T. J. Wong; and T. Zhang. "Politically Connected CEOs, Corporate Governance and Post-IPO Performance of China's Partially Privatized Firms." *Journal of Financial Economics,* 84 (2007), 330–357.

Fisman, R. "Estimating the Value of Political Connections." *American Economic Review,* 91 (2001), 1095–1102.

Francis, J. R. "What Do We Know about Audit Quality?" *British Accounting Review,* 34 (2004), 345–368.

Gande, A., and C. M. Lewis. "Shareholder-Initiated Class Action Lawsuits: Shareholder Wealth Effects and Industry Spillovers." *Journal of Financial and Quantitative Analysis,* 44 (2009), 823–850.

Goldman, E.; U. Peyer; and I. Stefanescu. "Financial Misrepresentation and Its Impact on Rivals." *Financial Management,* forthcoming (2011).

Gupta, S., and C. W. Swenson. "Rent Seeking by Agents of the Firm." *Journal of Law and Economics,* 46 (2003), 253–268.

Jayachandran, S. "The Jeffords Effect." *Journal of Law and Economics,* 49 (2006), 397–425.

Johnson, S., and T. Mitton. "Cronyism and Capital Controls: Evidence from Malaysia." *Journal of Financial Economics,* 67 (2003), 351–382.

Johnson, S. A.; H. E. Ryan Jr.; and Y. S. Tian. "Managerial Incentives and Corporate Fraud: the Sources of Incentives Matter." *Review of Finance,* 13 (2009), 115–145.

Karpoff, J. M.; D. S. Lee; and G. S. Martin. "The Costs to Firms of Cooking the Books." *Journal of Financial and Quantitative Analysis,* 43 (2008), 581–612.

Karpoff, J. M.; D. S. Lee; and V. P. Vendrzyk. "Defense Procurement Fraud, Penalties, and Contractor Influence." *Journal of Political Economy,* 107 (1999), 809–842.

Kedia, S., and T. Philippon. "The Economics of Fraudulent Accounting." *Review of Financial Studies,* 22 (2009), 2169–2199.

Khwaja, A. I., and A. Mian. "Do Lenders Favor Politically Connected Firms? Rent Provision in an Emerging Financial Market." *Quarterly Journal of Economics,* 120 (2005), 1371–1411.

La Porta, R.; F. Lopez-de-Silanes; A. Shleifer; and R. Vishny. "Investor Protection and Corporate Governance." *Journal of Financial Economics,* 58 (2000), 3–27.

Milyo, J.; D. Primo; and T. Groseclose. "Corporate PAC Campaign Contributions in Perspective." *Business and Politics,* 2 (2000), 75–88.

Palmrose, Z.-V., and S. Scholz. "The Circumstances and Legal Consequences of Non-GAAP Reporting: Evidence from Restatements." *Contemporary Accounting Research,* 21 (2004), 139–180.

Peng, L., and A. Röell. "Executive Pay and Shareholder Litigation." *Review of Finance,* 12 (2008), 141–184.

Roberts, B. E. "A Dead Senator Tells No Lies: Seniority and the Distribution of Federal Benefits." *American Journal of Political Science,* 38 (1990), 31–58.

Wang, T. "Investment, Shareholder Monitoring and the Economics of Corporate Securities Fraud." Working Paper, University of Minnesota (2009).

Wang, T. Y.; A. Winton; and X. Yu. "Corporate Fraud and Business Conditions: Evidence from IPOs." *Journal of Finance,* 65 (2010), 2255–2292.

Wright, J. R. "PACs, Contributions, and Roll Calls: An Organizational Perspective." *American Political Science Review,* 79 (1985), 400–414.

Yu, F. "Analyst Coverage and Earnings Management." *Journal of Financial Economics,* 88 (2008), 245–271.