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Exposing Malfeasance: Government Transparency in the Fifty States

By

Abby Kay Wood

A dissertation submitted in partial satisfaction of the requirements for the degree of

Doctor of Philosophy

in

Political Science

in the

Graduate Division

of the

University of California, Berkeley

Committee in charge:

Associate Professor Sean Gailmard, Chair Associate Professor Jasjeet Sekhon Professor Anne Joseph O'Connell

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Exposing Malfeasance: Government Transparency in the Fifty States

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by

Abby Kay Wood

Abstract

Exposing Malfeasance: Government Transparency in the Fifty States

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Abby Kay Wood

Doctor of Philosophy in Political Science University of California, Berkeley

Associate Professor Sean Gailmard, Chair

This thesis contributes to our understanding of government corruption and the transparency laws designed to prevent and expose it. Specifically, it analyzes the political conditions under which we expect to see transparency laws emerge, the strength of the laws we expect under different mixes political power, and the economic and political effects that result from transparency laws. It analyzes three cases of transparency laws: whistleblower laws; bounty laws, in particular the false claims act; and campaign finance transparency laws. These laws vary in terms of the burden and risk assumed by individuals availing themselves of the information provided by the laws. It finds, using quantitative methods supplemented by expert interviews, that the high burden, high risk laws are passed for politically predictable reasons, though they are less likely to have an actual effect in terms of political or economic outcomes. Low burden, low risk laws, however, have a clearer impact.

In addition to using large datasets on political advertising, county and local bond ratings and yields, and campaign finance disclosure laws, the project contributes original data on state-level whistleblower laws and local-level government corruption, as well as providing an update to existing data on state-level political competition.

Acknowledgements

This dissertation has been greatly aided by the thoughts, creativity, advice, and support of others.

My committee chair, Sean Gailmard, has helped me focus on the most promising aspects of each project and reassured me that it is interesting and important work at times when it felt like the opposite. He has offered not only methodological and substantive, but pragmatic, advice about both my research and my career. Anne Joseph O'Connell has provided important substantive advice and invaluable career advice and mentoring along the way. I am so glad that I followed Mike Lieberman's advice to get in touch with Anne when I got to Berkeley! Jas Sekhon has stepped in at important junctures in research design on this and other projects. Bob Kagan helped me conceive of and shape this project. For helping me to analyze, frame, or present the data in this project I am grateful to Terri Bimes, Henry Brady, Devin Caughey, Jack Citrin, Ernesto Dal Bo, Sean Farhang, Erin Hartman, Danny Hidalgo, Mary Hoopes, Adrienne Hosek, Francesca Jensenius, Gabe Lenz, Brent Nakamura, Max Nieman, Eric Schickler, Laura Stoker, and Rob Van Houweling. To my relief, the Berkeley Law faculty were happy to take in a lost lawyer-turned-political scientist, to help me ensure that my work is interesting and well-presented for both audiences. Chief among them is Kevin Quinn, who has been a supportive and welcoming sounding board, as well as an excellent mentor for teaching and research. Mark Gergen, Roseann Greenspan, Katerina Linos, Cal Morrill, Justin McCrary, and Eric Talley, thank you for stepping in when I needed you. I greatly appreciate my professors at Harvard that maintained an interest in my work and helped support my career, in particular Martha Minow and Matthew Stephenson.

I am lucky to have been a close collaborator with Doug Spencer, with whom I coauthored my fourth chapter. Doug and his light-hearted family made researching and writing this dissertation much more fun that it otherwise might have been. For Roman and me, having a nearby family in the trenches with us has been a blessing.

I have also managed to surround myself with fantastically smart and generous people from outside of my immediate scholarly path. Ben Graham read and commented on my dissertation prospectus in addition to being generally willing to talk with me about my research. Our regular shared meals were a source of encouragement and empowerment. I also appreciate Yves Chretien's willingness to answer phone calls about basic statistical concepts during my first year in graduate school as well as his convincing me that Don Rubin's insights about causal inference are amazing long before I could appreciate them.

The Undergraduate Research Apprenticeship Program at U.C. Berkeley provided me with dozens of fantastic research assistants for the last two years of this project. Having a team of undergraduates invested in my research gave me a weekly accountability mechanism and forced me to teach my work as it developed, which helped me understand emerging patterns much more quickly than I might have if I toiled alone.

I am also indebted to discussants and insightful audience members at the U.C. Berkeley Research Workshop in American Politics, the 2011 Conference on Empirical Legal Studies, and the 2011 meeting of the American Political Science Association for their feedback on this work and help in pushing it along.

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For Roman.

With you, everything is music.

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Chapter 1

Corruption and Transparency

1.1 Introduction

No government is immune from the challenges of public corruption, or public employees and contractors using their positions for private gain. Like any employer, the government cannot monitor all employees at all times. And like any employer, the government has rules in place to help facilitate oversight of employees. Overseeing employees for possible malfeasance is difficult. Because corruption, by its nature, is a hidden phenomenon, the most basic challenge is to expose it. Once malfeasance is exposed, accountability mechanisms can then work to hold the employee accountable.

Governments, like all employers, have a spectrum of tactics available to them for exposing malfeasance. On one end are active monitoring of employees' activities. On the other end are rules that allow and encourage employees to expose their own or others' malfeasance. Most governments pass rules that are more like the latter than the former whenever possible, for two reasons. First, it is simply too difficult to detect most kinds of corruption, and so active monitoring of employees might still not accomplish the desired detection of malfeasance. It might be a phenomenon that is much better observed by co-workers, rather than managers or others higher up the organizational chain. Second, any centralized attempt to monitor employees is expensive, and so decentralizing those efforts and empowering the "eyes and ears on the ground" to report what they see is thought to be more cost-effective. The laws passed to expose malfeasance in this way have a transparency function and so are included in a broader category of laws generally known transparency laws. They are called transparency laws because they make the inner workings of government, from decision-making procedures to finances to malfeasance, visible to the public.

There are many kinds of transparency laws, and in terms of their institutional design, they are not all created equally. One of the more important distinctions I make in this project is that transparency laws vary in the amount of burden and the

amount of risk they put on the entities or people charged with reporting malfeasance back to the principal. Another important distinction is that they vary based on whether they require a proactive disclosure of information, or a reactive response to a citizen-initiated request for information. Part of the task I take on in this project is classifying the universe of transparency laws according to these two factors. Then I move on to empirical evaluations of a few well-chosen case studies to explain how different institutional designs of transparency laws can matter for political and economic outcomes.

There have been very few successful empirical evaluations of transparency laws. The empirical analysis of this thesis is presented in three parts, each of which analyzes a prominent transparency law. For government employees, whistleblower laws are designed to protect employees from retaliation once they report malfeasance within government. Bounty laws go a step further. They protect employees from retaliation but offer a certain percentage of the government's recovery for reporting fraud against government. And campaign finance disclosure laws force those participating in politics to be transparent about their funding, in an attempt to avoid the "appearance of corruption", in the words of the U.S. Supreme Court.

The papers, taken together, show that not all transparency laws are created equally, and that the higher the burden on the entity asked to "pull the fire alarm", the less likely we are to see an impact from the law. In the rest of this introduction, I explain the theory underlying governments' use of transparency laws and remind readers of the historical context in which the laws analyzed in this thesis have emerged. Then I discuss broader impacts of the work and give a roadmap for the rest of the project.

1.2 Police Patrols and Fire Alarms

The principal-agent framework is helpful for understanding inter-branch and intrabranch activity in government. Thinking in terms of principals and their agents is something we often do to understand how the elected members of government monitor the actions of their agents – usually in the bureaucracy. This is the inter-branch understanding of principal agent problems. And within the bureaucracy, as within any large organization, there exists a second level of principal-agent challenges, in which those at the top need help both observing and policing the actions of agents further down the chain of command. This is an intra-branch principal-agent problem.

Various tools exist to help solve principal-agent problems. They have been described as "police patrols" and "fire alarms" (McCubbins and Schwartz, 1984). McCubbins and Schwartz envisioned inter-branch principal agent problems in their original article, but the intuition can be extended to intra-branch problems as well. Police

patrols are "centralized, active, and direct", whereas fire alarms are less centralized, less active, and less direct. In the context of oversight of possible malfeasance within the agency, for example, police patrols might require supervisors to sign off on even small-dollar contracts or to conduct surveillance of activities by lower-level employees. These oversight activities take valuable time and resources away from the agency's policy-related activities.

Fire alarms, on the other hand, empower or encourage other actors to report agent deviations from the principal's wishes. In the context of corruption within an agency, fire alarms encourage those who observe corruption to report it to the principal (enforcement arm of the agency), and sometimes, to the principal's principal (elected officials or the public). Many transparency-related laws can serve a fire-alarm purpose. For example, whistleblower laws empower and protect the jobs of public employees who report government corruption though the channels provided for in the law. False Claims Acts incentivize anyone who blows the whistle on fraud against government.

Other fire alarm laws help solve the principals' information problem. Enforcing any law necessarily involves overcoming an information problem and making wrong-doing visible. Whistleblower laws and false claims laws deputize individuals to report. Other laws, like open meetings laws and freedom of information laws (FOIA), are less about deputizing individuals to report and more about forcing government to remain "open and transparent", providing information and access to the government's principals, the people. Campaign finance disclosure laws and candidate financial disclosure laws also have an informational role. They make information preemptively available to the public, without requiring that any one person or group request it. Therefore, the informational role of transparency laws has an important "fire alarm" function as well.

Fire alarms are the less expensive alternative for catching government corruption, because they provide an avenue for increased investigation and reporting of malfeasance within government without simultaneously increasing monitoring and investigatory expenditures. They allow the bureaucracy more time to achieve its policy-related goals.

Not all legislators want strong transparency

Of course there is a player altogether separate from the bureaucracy that has a large say in whether the agency uses police patrols or fire alarms. That player is the legislature, which creates agencies and designs the laws that empower them and control how much insulation they have from other political actors. Terry Moe has theorized that the party that does not control the bureaucracy (the legislative minority party under unified government, or the legislative majority party under divided government) has a particular interest in reducing agencies' political insulation

(Moe, 1990*a,b*; Lewis, 2003). That party also has an interest in keeping the agency from being able to achieve its political goals. According to Moe, "opponents want structures that work against effective performance..." and so they like "checks and balances, and other structural means of promoting weakness, confusion, and delay". Moe was not writing about exposing malfeasance, but his intuition extends to the malfeasance context, because one way to keep an agency from attaining its political goals is to make it spend a lot of time and resources on intra-agency police patrols. Where that is not possible, a second-best solution is to write fire alarm laws to help expose malfeasance within the agency.²

The executive prefers weak fire alarms

What about the head of the executive branch (president or governor)? Open government and access to government information, with very few exceptions, sounds like a key democratic ideal. On his first day in office, President Barack Obama signed a Memorandum to all agency heads that he claimed was "meant to bridge the gap between the American people and their government" (White House, 2009). The initiative addresses the FOIA process, finance for the economic recovery, government spending more broadly, and some aspects of campaign finance, including information that affected the relationship between lobbyists (key campaign contributors) and elected representatives.

The legislative analysis above allows for a world in which the executive is indifferent to the level of malfeasance within the bureaucracy. But one does not have to believe that to extend this theory about institutional design and oversight to the realm of policing bureaucratic malfeasance. Instead, because exposure of malfeasance within the bureaucracy always hurts the executive, we must simply believe that, whatever the level of malfeasance in the bureaucracy, the executive prefers that it not be exposed. Therefore, the party that does not control the bureaucracy will always have a stronger preference toward transparency laws aimed at exposing malfeasance than the executive.

Everyone likes to claim credit

Importantly, transparency laws are thought to be very popular among the electorate. And so by passing or amending any transparency law that can colorably be

¹Indeed, in this excerpt, the "opponents" he mentions are interest groups, pressuring congress for a certain structural design to agencies.

²Note that I cannot actually test the tradeoff between the institutional design choice police patrols and fire alarms at the legislative stage with my available data. Here, I merely build intuition for future work.

said to strengthen transparency, legislators can claim credit. We therefore might see a lot of legislative activity that results in very little on-the-ground effects.

Partisan differences

The political parties also differ in their approach to transparency. At the moment, Democrats treat it as one of the planks in their platform. Republicans do not. Yet Republicans campaign against government. So whereas we think that all legislators benefit from credit-claiming for transparency laws, it's possible that Republicans have a stronger preference for strong and effective whistleblower laws, ceteris paribus. That is because they are much more likely to benefit from exposed government malfeasance. Government, particularly large government, is more associated with Democrats than Republicans. When a government official or employee is caught in a scandal, Republicans are better able to say "See? We told you government is bad!"

1.2.1 Transparency and Deterrence

Because of the increase in information available, transparency laws are thought to function both $ex\ post$ to expose and $ex\ ante$ to deter malfeasance. After malfeasance has been committed $(ex\ post)$, transparency laws should work to enable enforcement of laws against violators, to hold them accountable. When stories of such $ex\ post$ enforcement actions become public, they can deter future corruption.

Transparency laws act ex ante to deter the violations in the first place by increasing the probability of detection (Rose-Ackerman, 1999). This is the first-best reason to have transparency laws – it is always better to deter malfeasance in the first place than to catch it afterwards, even if catching it afterwards provides a full financial recovery to the victims. Transparency increases the probability of detection because it makes new information available, or at least accessible, to both enforcement bodies and to the public. Holding everything else constant, an increase in the probability of detection increases the expected cost of illegal or unethical behavior. The ex ante effect of transparency laws should encourage would-be violators to either not offend (because the newly-raised expected cost will exceed the expected benefit in at least some cases), choose a different crime (substitute), or disguise their malfeasance more cleverly in an attempt to avoid exposure.

1.3 History of Transparency Laws in the United States

The ideology of government "for and by the people" dates back to the founding of the United States, although actual laws to make the workings of government visible to the citizens did not emerge for more than 100 years. For example, in the early years of the country the Senate was closed to both the public and the press. Early attempts at transparency were narrow (e.g., opening the Library of Congress to the public)³, flawed (e.g., patronage-driven access to the press)⁴, fleeting (e.g. the brief attempt in 1876 to have lobbyists check in with the Clerk of the house), and easily evaded (e.g., the Federal Corrupt Practices Act of 1910).

Near the turn of the 20th century, in the wake of a handful of notorious political scandals, politicians began to publicly agitate for reform.⁵ Thus began the Progressive Movement and a concerted focus on transparency as a means of reducing government corruption (see Berger 2009). In 1912, Teddy Roosevelt formally established the Progressive Party, built on his belief that "behind the ostensible Government sits enthroned an invisible Government, owing no allegiance and acknowledging no responsibility to the people. To destroy this invisible Government, to dissolve the unholy alliance between corrupt business and corrupt politics, is the first task of the statesmanship of the day This country belongs to the people" (Roosevelt, 1913, ch. 15). Meaningful and sweeping transparency reforms did not appear for another 30 years. In the mid-1940s, Congress passed the Administrative Procedures Act ("APA") which provided that government information be made available to anyone who could demonstrate an interest in the information itself. Twenty years later, Congress enacted the Freedom of Information Act ("FOIA") that revised the information section of the APA, with a shift in presumption. Under the FOIA, there is no need to prove a personal interest in the information and the government is required to provide information, unless it is subject to one of nine exemptions. The federal government has continued to expand transparency. For example, in the 1970s, Congress passed the Federal Advisory Committee Act and the Government in the Sunshine Act, both of which emphasized the importance of open meetings at executive agencies and the White House. For a more in-depth review of early federal transparency

³Though even the Library of Congress was not open to the public until 1897 (Cole, 1993).

⁴Until the mid-1800's, the press that covered the Congress was granted access and printing contracts on a patronage basis. Not surprisingly, press reports were often highly partisan in nature (Senate.gov, 2011; Sunlight Foundation, N.d.).

⁵A classic example of the era's corruption is the indictment of Boss Tweed of New York's Democratic political machine. Mr. Tweed was convicted of siphoning more than \$45 million in city contracts and distributing them to political patrons at taxpayer expense. He was sentenced in 1873 to twelve years in prison (Burrows and Wallace, 1999).

laws, see Sunlight Foundation (N.d.).

At the state level, transparency laws follow a similar trajectory. The Progressive Era was primarily a set of state movements in favor of stricter labor laws and better working conditions. At the turn of the 19th Century, many state and local political institutions were heavily influenced by a cadre of wealthy industrial tycoons, most notably railroad "robber barons." As a result, state legislatures were notoriously unresponsive to the public. These conditions set in motion a series of drastic political process reforms such as women's suffrage, the direct election of U.S. Senators and, in many states, the implementation of ballot initiatives and referenda. Some states had experimented with Freedom of Information Act prototypes as early as 1900, though the bulk of these laws were passed by states in the 1940s and 1950s, typically as provisions of Administrative Procedure Acts (De Figueiredo Jr and Vanden Bergh, 2004). Following the Watergate scandal, states were quick to enact whistleblower laws that targeted the public sector. At present, all states have government transparency laws, though the extent of their use is and effectiveness is not particularly well understood, presenting a gap in our understanding that this project attempts to bridge.

1.4 Diversity of Transparency Laws in the United States

Evaluating federal transparency laws is difficult, because we lack a valid counter-factual case for the United States, post-treatment. We are far from the experimental ideal, in which we have two similar groups, one that receives treatment, and one that does not, and we measure the differences between the groups after the treated group is treated. Here, once the federal government receives "treatment" with a transparency law, we do not have a "control" version of the United States to watch, to see the differences between the two otherwise-identical cases. In the federal case, any changes we observe after a change in transparency law are difficult to attribute to the law and might have alternate explanations.

Luckily for researchers, there exists a lot of diversity among states in terms of many of their transparency laws. While each state is significantly smaller than the federal government, and so the scale of corruption, malfeasance, and campaign finance is less at the state level, the legal variation between states provides an interesting laboratory in which to test different legal regimes. Furthermore, in the aggregate, there are more state and local employees than there are federal employees, and so the number of people committing malfeasance at the state and local level is likely higher than at the federal level. Understanding how transparency laws can work to combat malfeasance — and how politicians can pass ineffective laws — at the state level can have broad implications for governments nationwide.

1.5 Broader Implications

This project has several broader implications for current lawmaking and institutional design. In the realm of government transparency, there will always be a trade-off between the burden on the government actors disclosing the information and the burden on the person availing themselves of the transparency laws and protections. Ideally, lawmakers will be able to strike a balance with these laws that is socially efficient. One of the broader implications of this study is that they do not seem to be striking the right balance under current laws. Chapter 2 gives a framework for thinking about the tradeoffs inherent in transparency legislation. By pushing legislation out of the realm of high-burden and high-risk to the person availing themselves of the transparency laws, we can expect them to meet with greater success. For lawmakers who are serious about rooting out government corruption, this is the key takeaway of the project.

Relatedly, we learn from these case studies to be skeptical of credit-claiming politicians who boast of strengthening whistleblower protections, particularly when they extend one-size-fits-all policies to their jurisdictions. Whistleblower laws and bounty provisions are a vastly under-researched area of governance, and the chapters about them (Chapters 3 and 4) present one of the few systematic evaluations of these laws. The chapters are informative in the skepticism they cast on the "exposing malfeasance" enterprise, particularly when those who are offered protections have to assume a heavy burden or a high risk in invoking the protections, as they do in the case of both kinds of laws. These lessons can apply both in the public sector and the private sector.

We also see that in the *Citizens United* era, proactive-disclosure transparency laws are an excellent and under-appreciated way to mitigate the effects of deregulated campaign finance. Knowing that their expenditures and support for a campaign will be exposed, candidates, parties, and supporters are less likely to run negative advertising. They are also less likely to pump money into the electoral process. After *Citizens United*, many states and the federal government still have quite lax and delayed disclosure mechanisms. By taking to heart the lessons presented in Chapter 5, states and the federal government can help mitigate the effects of *Citizens United*.

1.6 Organization of this Study

In this study, I address both the origins and effects of whistleblower laws. Figure 1.1 illustrates. I refer here to burden and risk on the person using the laws to open up government, and I use Chapter 2 to explain it more thoroughly.

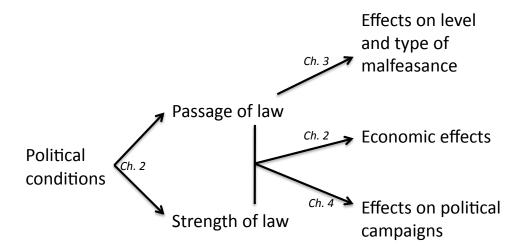


Figure 1.1: Basic structure of this project and overview of which chapters address which causal arrows in the chain between political conditions, transparency law adoption and strength, and social, political, and economic outcomes

The most interesting questions with regards to transparency laws are whether they work, how they work, and how we get them. In Chapter 3, The Political Origins and Economic Effects of Whistleblower Laws, I analyze the political conditions under which we see transparency laws arise, the political conditions that predict stronger transparency laws, and whether they can have direct economic effects at the state level. I use the interesting case study of state-level whistleblower laws to test whether extensions to existing theories can predict adoption and strength of whistleblower laws. Using an original dataset on state-level whistleblower laws, which is still under development, I find that theory does indeed predict the passage of a whistleblower law. It is harder to predict the strength of the law using the current measure of strength, but further research, as discussed in the conclusion for Chapter 3, will help verify whether we can predict the strength of transparency laws based on political conditions at the time of enactment. Chapter 3 also uses a forty-year time series of state, local, and county bond ratings and bond yields to estimate economic impacts of transparency laws. The results are currently null effects, indicating that the laws do not have an economic impact at the state and local level. The economic results are still tentative, pending a second data collection that I have planned. I conclude with caution and a roadmap for including more controls once the data is available.

In Chapter 4, I address whether bounty laws have an effect on the level and type of malfeasance observed before and after a bounty law is passed. Bounty laws, when used by government employees and contractors to report fraud against government, are the strongest form of high-risk, high-burden transparency law. If we do not find an effect

with bounty laws, it is unlikely that a bounty setup will work in any context. Using an original dataset of local-level malfeasance from Illinois, I find that the bounty law in question, the Illinois False Claims Act, is poorly designed to incentivize reporting of state and local-level fraud. I propose two possible modifications of the law to make it more appropriate for the state and local-level context. Bounty laws themselves might function well, when pitched at the right level, but the current state level False Claims Acts are too expensive for those observing state and local malfeasance to use as a fire alarm. They are far less effective than they could be.

The findings – and lack thereof – in Chapters 3 and 4 raise important questions: did lawmakers know that these laws would not work, but wanted to claim credit for them anyway? Or did legislators think they were passing effective laws, but underestimate the burden and risk on people needing to avail themselves of transparency legislation, unwittingly providing inadequate incentives and protections? And either way, are markets better able to estimate the impact of transparency legislation than legislators themselves are?

In Chapter 5, which is coauthored with Douglas Spencer, we turn to low-burden, low-risk transparency laws. Campaign finance disclosure laws vary across the country, but they have in common the relatively low burden and low risk that a person must assume to access information about campaign finance. In this paper, we examine two campaign-related effects of these laws: the tone of the campaign, and the amount of money spent in it. We find that increasing the strength of transparency laws has the effect of reducing the number of attack ads in the following election. We further find that transparency laws can be used instrumentally to reduce the amount of money in politics. It seems that the low-burden, low-risk transparency laws are more effective than their high-burden, high-risk counterparts.

Transparency is at the root of democratic governance. If government is of, by, and for the people, then the people need to be able to get information from government, including information about government abuse of the public's trust. Transparency existed as an ideal long before governments began to experiment with ways to actually bring it to fruition. In fits and starts, cities, states, and the federal government are edging toward greater transparency in some areas, while either misunderstanding or cynically misrepresenting the effects of transparency legislation in other areas. The areas of transparency that seem to be most challenging are those that look more like fire alarms than police patrols. It is clear that governments prefer to use fire alarm oversight where possible, because police patrol oversight is so expensive. But in this project, I show that fire alarm laws are not a panacea, and that with some forms of oversight, putting the burden on individuals to report requires a carefully-crafted law and willingness for the government to expend resources toward investigation more than most whistleblower and bounty laws currently do. Proactive disclosure, where possible, might have efficiency costs, but is much more likely to have actual impacts

in the domains it seeks to affect.

I conclude the project in Chapter 6 with a few words about transparency and technology. Because information is so closely tied to technology, the informational and investigative aspects of police patrols for oversight and exposing malfeasance are expected to become less expensive to the government over time. As technology becomes less expensive, the burden of opening up and investigating malfeasance within government, and the burden of producing information, should continue to decline. It is therefore possible to bring institutions like whistleblower protections and bounty laws into effect in a way that can reduce the burden – and sometimes the risk – on the person doing the reporting. As I demonstrate throughout this project, where the government shares the burden, the laws will be more effective.

Chapter 2

Unpacking Transparency as a Concept

Transparency is not well-conceptualized in political science. The most thorough work on transparency as a concept is by Alexandru Grigorescu, who notes that the reason for its poor conceptualization in political science is that it is used by different subfields to mean different things (Grigorescu, 2003). In scholarly work on inter-state conflict, transparency relates to information acquisition between states about subnational preferences and governmental support. The work on international regimes uses transparency to refer to a state's willingness to offer information to international organizations. And for studies of corruption, according to Grigorescu, transparency "can refer to a lack of corrupt practices in the country." We can be much more precise than that: transparency is not simply an absence of corruption. It is something that can exist alongside corruption, can expose corruption or that, by its absence, can help hide corruption. It is a tool, and it can be deployed with more or less success over time.

Grigorescu lands on a very abstract definition of transparency "of actor A toward actor B, ... the ability of B to receive information from A." Hollyer, et. al. (2011) use a similarly minimal definition, of "willingness of a government to release policy-relevant information", which is similar to Mitchell's definition as well (1998). Though other definitions exist¹ these minimal definitions provide an apt starting place for this Chapter. In these few pages, I unpack the concept of transparency and then use the concept to classify transparency laws. In brief, transparency laws are the formal institutions that structure the dissemination of government data into the public sphere. They are the focus of this study.

¹See, e.g., Vishwanath and Kaufmann, who define transparency as the "increased flow of timely and reliable economic, social and political information, which is accessible to all relevant stakeholders" (1999).

2.1 Transparency Generally

Transparency is a broader concept than merely government sharing information as required by law. Rather, while it always deals with government information, it can come about without reference to law at all. Changes in government procedures can create more transparency without being a response to legal requirements. For example, a simple increase in opening hours at a government data archive will, *de facto*, provide greater transparency simply by virtue of the extra time that the public can access data. Or an enterprising clerk deciding to post some government information online will also increase transparency, again, without legal impetus.

Similarly, transparency is not always about the government's information provision to the domestic public. It can be focused on external actors, like international organizations or other countries. The transparency that we often think about in American politics is focused internally, toward citizens and residents. But neither internal nor external openness implies that the other is also present. There are governments that are more externally transparent, like poorer countries who have to open up their books to multinational lenders but lack either the will or capacity to do the same for their citizens. And other governments are more internally transparent but hesitate to open up internationally (Grigorescu, 2003).

Moreover, just because data is made available does not mean that it is usable – "available" in the broader sense. By focusing on the dissemination of data, Hollyer et. al disregard any possibility that transparency is about the usability of information. Grigorescu's focus on B "receiving" information from A is perhaps closer to accounting for information usability. In either case, the availability, and more precisely, the usability, of information is an emerging aspect of transparency that is under-addressed in political science. This project does not test usability of information, either. But in our new, data-rich democratic environment, the quantity of information can quickly swamp the quality of information delivery. This is probably not an immediate concern - it still seems like government responds to information requests with as little data as possible – but it is a theoretical reality. Most citizens are unable to quickly analyze gigabytes of raw data. Akin to a large law firm "burying the opposition in discovery" by sending over truckloads of documents that are all theoretically responsive to a request from the opposing party, governments can, at least theoretically, provide virtual truckloads of data that are basically unusable by the average "information consumer". While the Wikileaks episode of State Department memoranda was not a voluntary government disclosure, the effect of receiving thousands upon thousands of internal memoranda could have had the effect of being a massive quantity of information that was largely unusable. As it was, it required crowd-sourced indexing to make it usable to the public. One can imagine a government responding with that much data to someone in hopes of burying government malfeasance in a tremendous amount of information.

Moreover, transparency is affirmatively *not* the absence of corruption. The two concepts are distinct, and while they do have a negative correlation, one is not simply the "absence" of another. Where there is transparency, corruption is more difficult to hide. But it does not mean that it is impossible to hide, and a lack of corruption does not imply full transparency. Some real-world examples help to illustrate. Singapore is apparently not a very corrupt place, in terms of public officials abusing public office for private gain. But that does not mean that it is transparent, particularly with reference to its own citizens. On the other end of the spectrum, certain states in the United States, like Illinois or Louisiana, are thought to be very corrupt. But they have strong transparency protections in place. Whether those transparency requirements are actually followed brings us to one more important feature of transparency: de jure vs. de facto transparency.

Transparency can be required by law - that's de jure transparency - but it can be undermined in practice (de facto transparency). Because government employees have various incentives to not be transparent, ranging from lack of resources to dedicate time to transparency, to an affirmative desire to hide information, de jure transparency will also be greater than de facto transparency. There are times when the reverse can be true, such as with government leaks. One example of de facto transparency undermining de jure transparency is providing data, but not in a usable format. Another example is gaming the rules so as not to have to be truly responsive or transparent. For the data collection in this project, I submitted a FOIA request to the Attorney General of Illinois, requesting data on the use of the Illinois False Claims Act over time. I received an email and phone call, both after hours, from an assistant in the Attorney General's office. I replied to both the email and the call to tell the respondent that I was actually in Chicago and would be for two more days, and that I would be happy to go make copies if he could get the documents for me. He called me back more than a week later. Clearly, despite complying with the formal requirements in the law, the Attorney General's office was not eager to provide defacto transparency.

Finally, transparency is most often focused on the executive branch of government. This is, in part, because those running the executive branch are not elected and therefore not electorally accountable. Obvious exceptions include of the head of the executive branch, and at the state level, a few other officials. But people in other branches can be forced to comply with transparency requirements as well. This is perhaps most true for those running for elected office, who might have to make financial disclosures, in addition to disclosures related to campaign finance. Therefore, it attaches to legislators as well as elected judges in many governments.

To summarize, transparency is a mechanism by which government information is revealed to the public. The information can be provided internally or externally, in response to a legal requirement or not, and in a usable or less-usable format. All of these features of transparency are important, and depending on which of them are present at the same time, or where on the spectrum of usable to less-usable the data is, a government will be considered more or less transparent. Moreover, all of the features can be structured by law. But in and of themselves, they are not legal concepts.

2.1.1 Transparency and Accountability

Probably the closest linked concept to transparency is accountability. Among scholars of government corruption and deterrence, lawyers, and governance activists, "accountability and transparency" is a common phrase. However, accountability and transparency serve different, but complementary, purposes. In a concise comparison of the two concepts, Lastra and Shams (2000) say that "accountability is an obligation to give account of, explain and justify one's actions, while transparency is the degree to which information on such actions is available".

The most generic kind of government accountability is electoral accountability. Every general election, citizens have an opportunity to "kick the bums out" of office. But electoral accountability is only one kind of accountability. There are other ways in which we can hold government officials accountable. Most of those ways come through the rules and procedures in place that define the obligations and proper conduct of a government employee. Many of these are ethical obligations, and some are criminal or civil penalties that attach to certain actions done in the line of work. Violation of accountability obligations usually results in some consequence suffered by the violator, whether it be a reprimand, prison time, or any number of other consequences.

Transparency is distinct from accountability. In order to hold government accountable, we need information that tells us what they are doing. That information is supplied by several mechanisms, one of which is government transparency. Transparency facilitates accountability, but it is not the same as accountability, and when the two are lumped together, conceptual confusion can result.

2.2 Transparency Laws

Transparency laws include any laws (regulations, statutes, judicial opinions and other laws) that encourage or require the government to provide information. In theory, transparency laws are not required for transparency itself to exist. People inside government can decide to make data available or technology can enhance data availability independent of legal requirements. However, a law might be required to

make them provide data consistently. Governments pass transparency laws not for the easy cases, but for the hard ones. Government agents will freely give data when it is convenient, but when they would prefer not to, that is when the law becomes crucial. It does not take much imagination to think of a situation in which a law would force an otherwise unwilling government official or agency to provide information that they would prefer to not disclose.

Transparency laws include administrative procedures acts (APAs), open meetings laws, freedom of information laws, whistleblower protections, qui tam (false claims) laws and other bounty-related laws, and disclosure requirements of all kinds, particularly for candidates for elected office. Administrative procedures acts govern the workings of the organizations in the executive branch of government. In addition to covering open meetings and freedom of information, they also govern the procedures by which agencies should make rules and regulatory decisions, including contracting and licensing decisions. Open meetings laws govern what qualifies as a meeting, which meetings must be open to the public, and how much notice the public should receive that a meeting will be held. They ensure that the entire deliberative process is observable by the public, with a few exceptions. Freedom of information laws allow for people – usually people within the United States, and always citizens of the state - to request non-exempted documents from the state. Requests can be made by mail, and in some states and some agencies, they can be made by telephone, fax, or online. Whistleblower protections might not traditionally be considered a transparency law, as the information flow is not necessarily from the government to the public. However, whistleblower laws encourage the sharing of information, at least within government, and they have a transparency function in that they expose the workings of government in order to enable accountability. Whistleblower laws encourage the sharing of what is usually considered negative information, because they protect a person from retaliation for reporting malfeasance. For the purposes of this study, the contemplated employee is part of the public sector or a contractor, but whistleblower laws in many states cover private sector employees as well. False claims laws and other kinds of bounty protections protect a whistleblower's job if she reports fraud against government, but bounty laws have an added incentive, which is a payment to the whistleblower of a certain percentage (usually up to thirty percent) of the government's recovery after the case is resolved. Finally, campaign finance disclosure laws govern contributions to and expenditures on behalf of candidates for office. Under these laws, candidates, political action committees (PACs), and parties are required to make regular disclosures of who has contributed or spent above a certain amount over a specified period of time. There are well-known exceptions to these laws that are addressed in Chapter 5, but for the most part, they require disclosure.

2.2.1 Not all Transparency Laws are Created Equally

Transparency laws differ in important ways. As explained above, they vary in the targets of the laws. Some transparency laws target the procedures within the executive branch, others facilitate access broadly, and still others aim more at ensuring that the election process is easily monitored. They also vary in their details, particularly in the timing of the release of information, in appeal procedures (where applicable), and in whether the disclosure is reactive or proactive.

Reactive and proactive transparency are relatively new concepts, but they are gaining in importance as information disclosure becomes less costly to the government due to ever-cheaper computing. Proactive disclosure is an obligation to disclose information at a regular interval, without it being requested by a citizen or a democratically elected official to whom an agency is required to report. Campaign finance disclosure laws are proactive in this way. Proactive disclosure is only lightly theorized and generally understudied, save in the election law context. Reactive transparency is when government offers up information only in response to a request from a member of the public or group. It is delayed in nature – indeed, delays are built into the laws creating reactive disclosure, like FOIA, which allows 10 business days to confirm receipt of the request and 20 business days to fill an information request, and also provides mechanisms for the agency to delay responding beyond those limits. Due to rapid changes in technology and the ever-decreasing cost of data storage, one possibility for the future of transparency laws is to push them all into the realm of proactive disclosure, in which most types of government data are made available to anyone automatically (Herz, 2009). Note that even in a world of proactive disclosure, whistleblower laws and bounty laws would still be necessary, because information about malfeasance will always be as hidden as the malfeasors can manage.

Most importantly for this project, which is most intensely concerned with the way in which transparency laws can expose and deter malfeasance, the most important legal variation is on two dimensions: the amount of resource burden and the amount of risk that the laws entail for the person availing themselves of the laws. In the FOIA context, this is the requestor. In the open meetings context, it is the person who wants to attend the meeting. In the whistleblower and bounty contexts, it is the person who will need whistleblower protection and the person who stands to receive a bounty once they expose the malfeasance they have observed. In the campaign finance disclosure context, it is the person who wants to access campaign finance information. The differences in burden and risk on these people can help explain why some transparency laws seem to have an effect, while others do not.

Figure 2.1 shows the types of transparency laws by the amount of burden and risk that is required to actually engage the transparency function.

Risk and Burden to the person using transparency laws

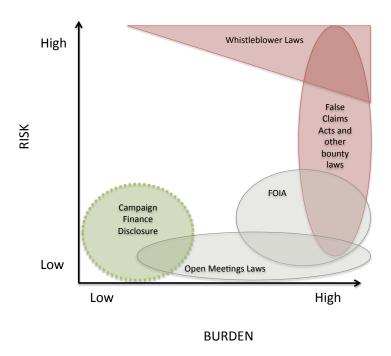


Figure 2.1: Common transparency laws by the risk and burden placed on the person exposing or utilizing the information (not the person or group revealing it). Whistle-blower laws, bounty laws, and campaign finance laws are analyzed in this project. The first two are red because we have no evidence of their working at the state and local level. The latter is green (dotted outline), because we do find evidence of its effectiveness. The two gray (lighter) colored circles, FOIA and open meetings laws, are natural extensions to this work.

In the high burden, high risk category are whistleblower laws and bounty laws like the False Claims Act. Bounty laws apply to employees both inside of and outside of government, and the person reporting does not have to be employed by the suspected fraudster in order to recover. Employees of the entity committing fraud, or those who observe coworkers defrauding the government, are in the high risk, high burden category. Those who are not employed by the fraudster have much less to risk, and so they are in the high burden, low risk quadrant. Occupying the other part of the high risk, high burden quadrant are most whistleblower laws. Whistleblower laws are almost universally high risk and high burden, because the person blowing the whistle is usually inside the organization, and the burden on the whistleblower to produce documentation of the wrongdoing is generally non-negligible. As is discussed in Chapter 3, whistleblower laws vary within the high risk category, particularly in the range of outlet that are acceptable for the whistleblower to use to bring the alleged malfeasance to light. In a government agency that only allows whistleblowing to one's supervisor, risk is very high, because the supervisor might fire the employee and never act on the alleged malfeasance. In an agency that allows whistleblowing more broadly, say to the media, the risk is marginally lower, yet still high. The burden can vary with the burden of proof on the whistleblower, though most are very high burden. Some laws require proof that malfeasance is ongoing, and others allow whistleblowers to report suspected malfeasance.

Because most whistleblower laws are both high risk and high burden, the high risk, low burden quadrant includes only the small percentage of whistleblower laws that require the whistleblower to report internally first, but allow a low burden of proof.

The low-risk, high-burden quadrant contains FOIA and Open Government laws. These are low-risk because one does not have to disclose the reason for attending or watching a meeting (say, on C-SPAN) or requesting information via the FOIA process. However, the burden can be incredibly high in some contexts. For example, a FOIA response can take years to receive, and the agency can decline to release information, even though the requested information does not fit into a FOIA exemption. The requestor must then file an appeal, which if denied, would then enter the court system, a process that can take years.

Finally, other transparency laws are both low-risk and low-burden. Many types of so-called "proactive disclosure" are of this nature (Sunshine Review, 2012). Campaign finance disclosure laws, the subject of Chapter 5, are low-risk and low-burden for the consumer of the information. Campaigns, parties, and PACs must disclose most sources of contributions and expenditures on a regular schedule, without any particular request being initiated by an individual or organization. The burden and risk to any particular individual on the information-receiving end is low under these transparency regimes.

2.2.2 Where You Stand Depends on Where You Sit

Of course, the information recipient's (or more grandly, democracy's) gain is someone else's loss. People and organizations have to dedicate resources to produce the information, and sometimes the burden is quite high on the other side. A pitiable small-town mayoral candidate who has to keep every receipt, and a low-level bureaucrat who has to take time out of her day to answer a FOIA request might feel quite differently about transparency than the newspaper reporter accessing campaign finance data or the lawyer who made the FOIA request on behalf of her client. There are risks and burdens on the information provider's side of the transparency equation that are important to consider. While they are generally beyond the scope of this project, I mention them here briefly, because a thorough welfare analysis requires consideration of costs on both sides. On the burden side, transparency laws can cause a serious burden on the government or candidate for office, with efficiency costs that outweigh the informational benefits (Annachiarico and Jacobs, 1996; Ting, 2008; Behn, 2001). Many government bodies, like smaller agencies, or city governments, do not have employees dedicated to only filling information requests, for example, and so time used filling FOIA requests is time not used on official business. For officials running for office, particularly unpaid office, the burdens of both personal financial disclosures and campaign finance disclosures, with their frequent deadlines and voluminous disclosures, can be overwhelming.

Furthermore, in some rare instances, disclosures information carry with them some level of risk. This is particularly true in the campaign finance context. Take, for example, campaign contributions to socially unpopular candidates or ballot initiatives. If the donor's identity is made public, they might be subjected to harassment. A recent example concerns the Proposition 8 battle in California in 2008. Proposition 8 was a ballot initiative and constitutional amendment on the state-wide ballot with the self-explanatory title "Eliminates Right of Same-Sex Couples to Marry". The battle between the two groups was dramatic and expensive, and after both sides made their disclosures, the addresses of contributors to the pro-Proposition 8 groups were geo-tagged by enterprising gay-rights activists. This resulted in some pro-Prop 8 contributors reporting harassment. While disclosure is still required in these cases, in other cases, exceptions have been carved out to general disclosure requirements. In Brown v. Socialist Workers '74 Campaign Committee, 459 U.S. 87 (1982), the Supreme Court held that in light of the history of harassment against the socialist party and its members by both private citizens and the government, a state-level campaign finance disclosure law could not constitutionally be applied to them.²

 $^{^{2}}$ It should be noted that both of these types of disclosures can currently be avoided by contributing to a 501(c)4 organization which then gives to a political action committee, because the donation cannot be traced, since the 501(c)4 is not required by law to disclose contributions.

2.3 Summary

To summarize, transparency is a mechanism by which government information is revealed to the public. In this brief chapter, I have provided an overview of transparency as a concept. Transparency is not merely the absence of corruption, and it is not jointly tied to accountability laws, though it facilitates both anti-corruption initiatives and accountability. Transparency has various dimensions, which have been explained here, such as usability and proactive vs. reactive transparency. It is not always a response to a legal requirement, though transparency laws help ensure consistent access to information and protection to those disclosing it who put themselves at risk in doing so. Transparency laws vary in the level of burden and risk that must be assumed by the person availing herself of the transparency laws. While the burden, in particular, can be felt by both sides of the transparency equation – the government and the individual or group involved in information requesting or blowing the whistle – the key element to explaining the effectiveness of transparency laws lies in this divide, as I explain in the chapters that follow.

Chapter 3

The Political Origins and Economic Effects of Whistleblower Laws

3.1 Introduction

When an employee of a state administrative agency observes or suspects malfeasance on the part of a co-worker, her decision to report that malfeasance rests, in part, on whether she can anticipate retaliation for reporting. Whether she will suffer retaliation depends in large part on the strength of the law granting whistleblower protection to state bureaucrats. Those protections are the focus of this essay.

Across the fifty states, the strength of whistleblower protections for public employees varies considerably. Some of the weakest whistleblower protections will protect whistleblowers from retaliation only if the whistleblower reports to a supervisor first, and only if the act she reports is criminal in nature. Stronger laws protect whistleblowers from retaliation for reporting information about a much broader set of infractions, including waste or endangering health or safety, to a much broader set of audiences, including the legislature or even the news media. There is also variation in the type of employees protected by the law. All states protect at least some members of the bureaucracy from retaliation for reporting at least some acts of malfeasance. But the scope of employee types varies from all public employees to small subsets of bureaucrats in particular agencies. Employees of the legislative and branch are rarely offered as full a panoply of protections as executive branch bureaucrats. All of these types of variation have important implications for government corruption and political outcomes at the state and local level.

In this essay, I ask whether political conditions at the time of legislative enactment of a whistleblower law can predict whether state employees receive strong or

weak whistleblower protection. The findings can inform our efforts to improve governance by helping us recognize when the legislature can be relied upon to increase transparency. At times when political conditions in the legislature will not allow for transparency-related reforms, that task falls to judges. State court judges have historically been willing to offer protections to workers when legislatures were unwilling or unable to protect them. Protecting whistleblowers through a "public policy exception" to at-will employment is just such a case. But following the tenants of legal process theory, we prefer that our laws be written by elected officials rather than unelected judges. So a judicial solution is a second-best, and highly uncertain, option for reformers.

This essay proceeds as follows. I start in Part 3.2 by explaining the role and evolution of whistleblower protections over time. Then in Part 3.3 I explain theories on why legislators would pass whistleblower laws, when we might expect them to pass stronger versions of them, and what effects we can anticipate from the laws' enactment. I also present hypotheses derived from these theories. In Part 3.5, I describe my data collection, measurement of legislative political competition, and strength of whistleblower laws. Part 3.6 discusses my methodology and findings. I conclude in Part 3.7.

3.2 Whistleblower Laws

The story of federal whistleblower protection is similar to the situation in many states in the United States, and so I begin with it. Like many states, the first whistleblower protection in the Untied States aimed at only one possible aspect of all the possible kinds of malfeasance and all the different types of employees who could report it. In the federal case, this whistleblower protection came in the form of a Civil-War era law called the False Claims Act, a state version of which is the subject of Chapter 4. In brief, the False Claims Act incentivizes whistleblowers to report fraud against government. It varied in usage and strength for the next century, and during that time there was very little other legislative action on protecting federal government whistleblowers (Callahan and Dworkin, 2000). It wasn't until 1989 that a general whistleblower law was passed in the United States (Whitaker, 2007). The Whistleblower Protection Act law protected federal employees reporting various kinds of malfeasance within government, such as "a violation of any law, rule, or regulation, or (ii) gross mismanagement, a gross waste of funds, an abuse of authority, or a substantial and specific danger to public health or safety," (5 U.S.C. § 2302). Covered employees include current or former employees and applicants to jobs in the executive branch, competitive and excepted service, and Senior Executive Service (Whitaker, 2007).

As is often the case, there were states that moved more quickly than the federal government in legislating in this domain. State-level whistleblower protections have existed since the 1960s, when some state judges began to recognize a "public policy" exception to at-will employment for whistleblowers who had been fired or retaliated against in the wake of their disclosures.¹ Soon thereafter, some state legislatures passed statutes offering this protection as well.

Most of the states adopted their whistleblower laws after the Watergate scandal broke.² The timing of each state's adoption is illustrated in Figure 3.1

As is clear from the map, the timing of adoption seems to be related to region. Most western states adopted statutes early, and most southern states were significantly later. Most states adopted in the 1980s.

3.3 Predicting and evaluating impacts of transparency laws

Like all laws, transparency laws are designed to incentivize certain behavior. When a legislature passes a whistleblower law, it must balance its desire for information disclosure with the bureaucrat's incentives to perform (Ting, 2008). Theory predicts that overly stringent accountability mechanisms can hinder both efficiency and effectiveness (Behn, 2001; Moe, 1984; Annachiarico and Jacobs, 1996). This effect might have implications on the other, more political aspect of bureaucratic accountability, in that it can make bureaucrats less zealous and more risk averse (Rose-Ackerman, 1975; Behn, 2001; Gailmard and Patty, 2007). In addition to concerns about setting the right level of incentives, lawmakers have other considerations to balance. Transparency laws, including whistleblower laws, can be approached from a variety of theoretical perspectives.

¹A potentially important control variable that I have yet to test is whether the state already had a judicial precedent providing this protection. Autor (2003) has it for some years, and I have his data, though I will likely need to extend it back in time, since his data starts in the mid 1970s.

²The Watergate scandal emerged as a result of the Republican party's break-in to the Democratic Party's headquarters in the Watergate office complex in Washington, D.C., and the attempted coverup that followed. It resulted in the resignation of President Richard Nixon. It is important in the whistleblowing context because of the prominent role played by a government whistleblower, who was known only as "Deep Throat" at the time. Thirty years after he provided information to the Washington Post about the break in and cover-up, Deep Throat was revealed to be a former Deputy Director of the FBI.

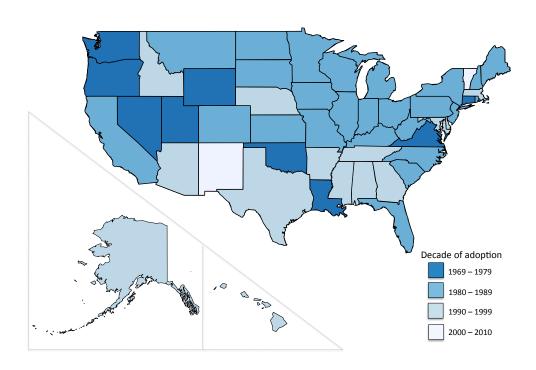


Figure 3.1: Decade of adoption of each state's first whistleblower statute.

3.3.1 Informational theories

In the political science literature, one function of procedures and laws aimed primarily at bureaucratic oversight is to correct an informational asymmetry between Congress and the agencies (Banks and Weingast, 1992). Usually the information sought is on a particular policy preference that might skew a particular agency's policy recommendation, the goal being political control (McCubbins, Noll and Weingast, 1987, 1989; Bawn, 1997). Or the legislature could seek to incentivize a particular level of expertise that the legislative committees are unable to attain on their own (Lupia and McCubbins, 1994).

Whistleblower laws can be thought of as an effort to obtain a different kind of information entirely. The information sought by passage of whistleblower laws is whether members of the bureaucracy are complying, not with the policy preferences of the legislature, but with the laws and ethics codes against malfeasance. By pass-

ing strong whistleblower laws, the legislature increases the amount of information available about bureaucratic compliance with ethical codes and laws. It also probably increases the noise contained by that information, since by lowering the costs to whistleblowing, some bad actors within the bureaucracy might use whistleblower complaints to harass their fellow bureaucrats with "junk" complaints. The informational asymmetry is strongest when the party controlling the legislature is not in control of the executive branch, which leads to my first hypothesis.

Hypothesis 1: We expect to see more government whistleblower laws pass under divided government than unified government.

3.3.2 Political determinants

Scholars of congress, the bureaucracy, and public law have all examined the political determinants of institutional design of agencies, but to my knowledge, the literature on transparency for the entire bureaucracy is limited to studies of the procedural requirements of Administrative Procedures Acts (McCubbins, Noll and Weingast, 1987; De Figueiredo, 2002). My extension of these theories to the realm of whistleblower laws contributes new data, analysis, and theoretical extensions to these literatures.

The most basic predictor of good governance generally is a high level of political competition (Key Jr, 1949). Many governance issues can resolve themselves once there are at least two evenly-matched parties vying for office, because if they deliver poor governance, the other party will be sure that the public becomes aware of that fact. Knowing that the other party is trying to replace the sitting party, the sitting party has an incentive to deliver good governance. One way to do so is to pass whistleblower laws.

Hypothesis 2: We expect to see stronger whistleblower laws where political competition is high.

According to existing theories, members of Congress desire to monitor the bureaucracy with minimal effort. The nature of the monitoring is usually conceived of as preventing policy drift, though monitoring can also prevent (or expose) bureaucratic malfeasance. To that end, Congress designs mechanisms for the public to sound "fire alarms", rather than having to conduct a "police patrol" of the bureaucracy (??). The mechanism by which Congress does this is to add procedural requirements to facilitate the sounding of the "fire alarms" (McCubbins, Noll and Weingast, 1987).

Politics can affect the design of institutions aimed at monitoring the bureaucracy. For any given set of political conditions, there is a latent ideal level of monitoring for the bureaucracy. Therefore the actual design of the institution will be complicated

by the minority legislative party (Moe, 1984; Lewis, 2003). The relative strength of the majority and minority parties in the legislature, the level of legislative party competition, is expected to affect the level of insulation that bureaucratic officials receive (Moe, Chubb and Peterson, 1989; Lewis, 2003).³ I expect that the level of legislative party competition will also affect the strength of transparency requirements placed on public officials.

A related line of empirical work has explored the analogy of Odysseus tying himself to the mast, but in the bureaucratic transparency context. In that famous myth, Odysseus's boat is headed in the direction of the sirens, and Odysseus realizes that if he remains at the helm, he will direct the boat into danger, with great risk to all. Therefore, he demands that his companions tie him to the mast of the boat and disregard any orders he might give, in order that they will all survive and not be lured by the sirens. In the governance context, tying oneself to the mast is similar to passing laws that restrain the power of the executive branch. When the governor's party has a political majority in the state but is electorally weak over the past decade, they are more likely to pass a state Administrative Procedures Act, restricting their powers even during a rare turn in office (De Figueiredo, 2002). This is particularly true when Democrats are the electorally-weak ruling party of the state (De Figueiredo Jr and Vanden Bergh, 2004). The ruling party knows its time in the executive branch is fleeting and therefore chooses to bind the executive branch while they occupy it, in an effort to bind the party that is usually the majority in the state.

Whether the bureaucracy and legislature are dominated by the same party (unified government) or different parties (divided government) affects the type of delegation that occurs and amount of insulation that the agency receives (Epstein and O'Halloran, 1999; Lewis, 2003). By extension both the presence or absence of divided government and the strength of the minority party in the legislature should affect the strength of transparency laws passed by any given legislature, particularly when the laws aim exclusively at the bureaucracy. The predictions for how divided government and legislative political competition should affect the probability that a given legislature passes a stronger or weaker transparency law (or provides high or low support to an existing law) are the same as predictions for how divided government and political competition should affect the probability that a given legislature will insulate an agency it creates from presidential control (Lewis, 2003). My version of this theory is in Table 3.1.

From this table, I derive hypotheses 3 and 4:

Hypothesis 3: Under divided government, lower levels of legislative political competition will lead to stronger government whistleblower laws.

³This has been expressed in public law terms, for judicial review, by Ginsburg (2002), and North and Weingast (1989), with divergent predictions.

Legislative Political Competition				
	Low	High		
Unified Government	weaker	stronger		
Divided Government	stronger	weaker		

Table 3.1: Political Competition and predicted strength of transparency laws

Hypothesis 4: Under unified government, higher levels of legislative political competition will lead to stronger government whistleblower laws.

From the institutional starting point, we can consider a partisan dimension to transparency. Republicans and Democrats seem to think of transparency differently. Republicans mistrust big government, and so they are thought to benefit whenever a corruption scandal is exposed. All else equal, Republicans might therefore be more likely to pass transparency laws if they believe that the laws will work to expose corruption. The behavior of Democrats is harder to predict. They might have an incentive to pass the laws as a preemptive and credit-claiming measure, knowing that Republicans will generally prefer them. For Democrats, passing a transparency law provides an opportunity to work "across the aisle", since Republicans will generally vote for them. Where Democrats have longstanding control of state government, particularly the executive branch, they might be less likely to pass the laws (provided they think the laws will work to expose corruption), since exposed corruption casts government (and therefore Democrats) in a bad light.

3.4 Economic impacts

Transparency laws are aimed, in part, at disclosing corruption, which enables accountability rules to be enforced. Foreseeing the strengthened accountability regime should deter corrupt acts, or at least raise the cost of them. Yet we lack a direct measure of corruption levels, which makes the search for deterrence impacts particularly challenging. While some attempts at direct measures of corruption have been made internationally (Olken, 2007; Golden and Picci, 2005), there there is no direct measure of corruption in the United States. Even my attempt to measure corruption in Illinois in Chapter 4 is simply a measure of revealed corruption, not all corruption.

There are two indicators of public corruption that have been used in recent years to measure state-level public corruption in the United States. One is a survey of state house reporters by Boylan and Long (2003). Like international corruption indicators, this survey asks for subjective impressions of the level of corruption in the state in a

given year.⁴ The other indicator that has been used to measure public corruption in the United States is the number of federal prosecutions of state and local level public corruption (Goel and Nelson, 1998). The two measures have a positive correlation of 0.64, but the federal prosecutorial measure, as a measure of corruption, is thought to be weaker, because it requires the assumption that state priorities regarding prosecuting corruption are uniform across states, which is tenuous at best. (Boylan and Long, 2003; Alt and Lassen, 2003).

Measuring the impacts of transparency laws in terms of corruption requires creative thinking. One possibility explored recently by other scholars is that improved governance can be observed in changing state and local government bond yields or ratings. An indirect measure of general confidence in state governments is bond ratings, which affect the interest rates that governments must offer in order to take on debt. The interest rate on bonds might be expected to decrease in the year after a whistleblower law is passed, because after the law is passed, an investment in the state is marginally less likely to be spent on bribes and marginally more likely to be spent on a program that can generate returns to repay the debt, all else equal. Similar reasoning implies that the rating on a bond is expected to improve after a whistleblower law is passed. This logic follows Depken and Lafountain (2006) and Butler, Fauver and Mortal (2009), both of which analyzed the relationship between state bond data and the number of federal prosecutions in the state (a measure of corruption that has obvious weaknesses, as explained above), finding the expected relationship that states that are more "corrupt" by their measure must offer higher interest rates when they issue debt.

Hypothesis 5: An increase in the strength of a whistleblower law will result in a decrease in the interest rate on (improvement of the rating of) bonds issued within the state.

Reconciling Hypothesis 5 and findings in previous literature is more complicated than it seems at first blush. The assumption underlying Hypothesis 5 is that an increase in the strength of a whistleblower law will send a signal to would-be investors that the state is a safer place to invest than it was before the law went into effect. But whistleblower laws, like all transparency laws, can also serve to expose corruption. Corruption exposure is a downstream effect of whistleblower laws that can work against the state's economic interests, particularly if it leads to prosecutions, as was shown in Depken and Lafountain (2006), and Butler, Fauver and Mortal (2009). A

⁴See Lambsdorff (2004) for a description of the methodology used to create the most well-known cross-national corruption measure, the Transparency International Corruption Perceptions Index, and see Kaufmann (2004) for why subjective measures of corruption might be measured with less error than more "objective" measures.

conversation with a municipal bond rater at Standard and Poor's indicated that raters are unlikely to consider the legal framework with respect to government accountability when rating bonds. They instead rely on financial indicators of a city's health, as well as managerial aspects of city governance, such as how often the city council meets.

The next section describes how I measure and operationalize these concepts and provides descriptive results. I describe an original dataset of state-level whistleblower laws and updated data on political competition. I have also gathered proprietary data on state, county, and municipal bonds.

3.5 Whistleblower laws and political conditions

The data collection for this project is ongoing.

3.5.1 Strength of Whistleblower Laws

In order to evaluate the "strength" of transparency laws, we need a measure. Which provisions of whistleblower laws make them "strong" enough to be effective? Some NGOs have attempted to rank governments based on their anti-corruption institutions; one has even rated state-level whistleblower laws (Public Employees for Environmental Responsibility, 2009) in a two-year panel. Expanding on the existing measure, I identified 178 state-level whistleblower laws available on Lexis Nexis from the late 1960s through summer, 2011. The database is comprised of each state's original law and all subsequent amendments, where available. Seventy-eight original laws and amendments are not in Lexis Nexis, so the data collection process is ongoing. Many of the missing laws and amendments are from the earlier years in the time series, which could bias the data in worrisome ways. It could be that states that were "early adopters" of whistleblower laws are systematically different from states that adopted whistleblower protections later. I have attempted to control for this by using robustness checks, but the possibility remains, and so I will continue to collect and code the laws until I have the entire set.⁵

I have coded the laws on more than 80 different features, such as whether the law covers only the executive branch or all three branches, to whom whistleblowers can make a protected disclosure, and the types of malfeasance that a whistleblower can report and still receive protection. The complete list of features is in the data appendix.

⁵In this version, data from California is also missing in most specifications involving the strength of the law. I have date of passage and extension to local government, but I have not yet given the many versions of the whistleblower laws of California a score.

My measure of strength is comprised of three separate elements: the types of employees covered (SCOPE), the types of violations that an employee is protected for reporting (VIOL), and the acceptable outlets for disclosure, such as law enforcement, co-workers and supervisors, and the media (DISCLOSE). I chose these three aspects for a few reasons. First, these three elements must be the most important to any person contemplating reporting malfeasance. They ask themselves whether the law applies to them, whether it applies to the malfeasance they have witnessed, and to whom they should report. Secondly, they are intuitively the most important. Legal features like the penalty on the employer for retaliating or the statute of limitations are second-order concerns. Moreover, these three features were far and away the most frequently amended by state legislatures, reflecting a concern on the part of the legislatures of striking the right balance for the government and its employees. I assigned each feature of scope, violations, and disclosure a value based on how much protection it offered, and I aggregated those values for the law's score. Of course this had been attempted before by PEER, but only for two years worth of data, and not in as much detail as I have used on my forty-year time series. Details are available in the data appendix.

Figure 3.2 shows the overall levels of the three different measures during stateyears that had legislative activity, and the combined strength measure. The average score is surprisingly flat over time, though this image does not show the increase in the number of states (and the number of employees) covered over the time period.

My measure of strength is only a de jure measure of strength. In some contexts related to accountability, we might imagine that a legislature creates a strong enforcement body or transparency mechanism – say an ombudsman with prosecutorial powers, or a mandate to post all agency expenditures online – but then does not provide the funding or support to that body or mechanism in order for it to actually fulfill its legal mandate. We sometimes observe this sort of behavior in countries vying for support from foreign investors and governments or international nongovernmental organizations. The legislature of the country wants to signal that it is reforming its corrupt ways, so it passes a strong anti-corruption law. But then it allows the new institution to whither and die, by denying it funding, staffing it with cronies, or any other myriad ways of undermining the institution.⁶ In cases like these, the de jure

⁶The story of the Philippine Ombudsman is exactly like this. The legislature created the ombudsman as basically a co-equal branch of government. The Ombudsman's office was the office in charge of prosecuting former President Estrada, but it was so poorly funded by the legislature that it was forced to seek outside funding, eventually securing some from the Asia Foundation and European Union in order to carry out the prosecution.

Mean scores for each category, by decade VIOL SCOPE DISCLOSE COMBINED 20 1970 1980 1990 2000 2010

Decade

Figure 3.2: Mean scores for whistleblower laws by decade. This data contains only state-years in which there was a change in the whistleblower law. The red (solid) line is a sum of three different scores. The green (dotted) line is a score for the different types of disclosure allowed or required before a whistleblower is protected. The pink (dashed) line is a score for the types of employees covered. And the blue (dash-dot) line is for the types of violations that can be reported under the whistleblower law.

strength tells only part of the story. It is mitigated by the lack of support for the institution – resulting in *de facto* weakness.

While the de jure / de facto divide is both theoretically and practically important in some contexts, I have not tracked the de jure strength of the whistleblower laws in this project. Whistleblower laws are less vulnerable to this sort of budgetary weakening. They rely on state court judges to interpret the laws to protect whistleblowers. Judges certainly can weaken whistleblower protections by interpreting the laws nar-

rowly. The legislature itself has very few tools available to it in manipulating judicial interpretations of whistleblower laws in a way that would undermine an otherwise strong law.

3.5.2 Political conditions

Theory predicts that the two most important political conditions for predicting stronger or weaker oversight of the bureaucracy are whether the state is under divided government, in which the governor is from the minority party in congress, and the level of political competition in the legislature. Divided government is straightforward to measure, and I have done so for the entire time period under consideration.

One standard measure for legislative political competition is the share of seats held by the minority party. I build upon the Partisan Division of American State Governments series data (Burnham, 1996), updated by Dal Bo et al 2009, and now by myself, to extend this measure to the current time.

Political competition in the legislature has declined over time. Perhaps counterintuitively, there is far less political competition under divided government than under unified government. Figure 3.3 illustrates.

The percentage of seats held by the minority party in the less competitive legislative chamber is a helpful measure, though it is even more informative to know each state's legislative override requirements and filibuster supermajorities. Under unified government, the obstacle to passing a bill into law is whether the majority party can stop a filibuster by invoking cloture. Under divided government, the obstacle is at a later stage: whether the majority party can override a veto. In this specification of political competition, I code for high and low legislative political competition according to whether the government during that year is unified or divided. My coding scheme is under unified government, high political competition exists when the majority party cannot stop a filibuster, and under divided government, it exists where the majority party cannot override a veto. Where cloture or override exist under their respective government regimes, I code them as not high competition. Given that the dataset is comprised of laws that have succeeded in passage, they have overcome whatever filibuster exists at the state level, if any, and so we might not observe an effect given this specification. Table 3.2 shows descriptively that over the 1966-2011 time

⁷Furthermore, an over-time collection of filibuster data is not available, but is currently being gathered by researchers at University of Iowa. For now, I am using data gathered by the community at Open Left, available at the second table at this link: http://www.openleft.com/diary/17831/36-state-senates-preclude-the-possibility-of-filibuster. That table is the starting point

Political competition under unified and divided government over time

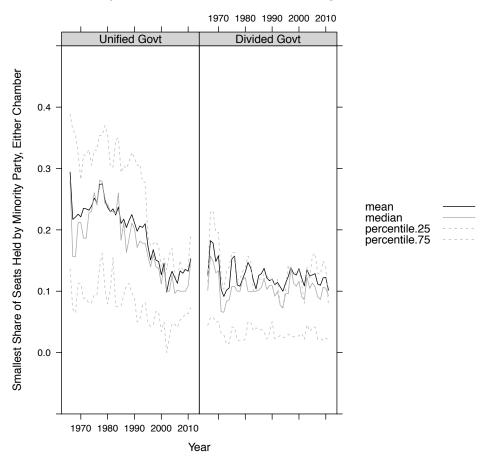


Figure 3.3: Political competition over time, using the share of seats held by the minority party in the least competitive of the two houses in the state legislature. Darkest line is mean, gray solid line is median, and dashed lines are 25th and 75th percentile.

period, most laws were passed under divided government, with a lot of them passed under divided government with high political competition – in this case, the absence

for the ongoing project in Iowa. In light of the lack of specific data over time, I make four assumptions at this early stage: first, I assume that a supermajority requirement to stop a filibuster is $^2/_3$; secondly, I assume that the "mixed" cases listed in the table, which require a supermajority for passing financial laws, do not require the supermajority for transparency legislation; third, I assume that the procedural rules as of 2011 were constant over time; finally, I assume that filibusters only happen in the upper house. When more data is available, I will be able to correct for errors in all four assumptions.

of a veto override by the majority party. One other measure of political competition discussed in the literature is one developed by De Figueiredo Jr and Vanden Bergh (2004). I have replicated their measure, and it can be found in the data appendix.

High Legislative Political Competition			
	No	Yes	
Unified Government			
number of state-years	191 (9%), 324 (16%)	140 (7%), 347 (17%)	
number of laws	21 (11%), 15 (5%)	7 (5%), 25 (7%)	
average strength	40.8, 32.5	33.9, 37.6	
Divided Government			
number of state-years	61 (3%), 282 (14%)	399 (20%), 268 (13%)	
number of laws	5 (8%), 19 (7%)	43 (11%), 32 (12%)	
average strength	44, 40.6	37.9, 38.4	

Table 3.2: Unified and Divided government, 1966 - 2011, with level of political competition measured as absence of cloture under unified government, or absence of veto override in divided government. Number of state-years (overall percentage), number of laws passed under each condition, and strength of laws passed. Republican majority party legislative state-years in red (left), Democrat majority party legislative state-years in blue (right). Percentage of each party's state-years in each condition that were used to pass laws are in parentheses in the "number of laws" row.

Within each combination of divided and unified government, whether Republicans or Democrats have the majority in the legislature seems to play only a limited role, as is evidenced by how generally close the percentages and scores are within each cell, particularly under high political competition. One interesting feature is that under low political competition, Republicans might out-perform Democrats in terms of the strength of the laws that they pass. They don't have all that many opportunities under either scenario, but the laws passed by Republican legislative majorities do seem to be strong. This is a proposition I will test formally as well.

Table 3.2 might under-estimate the level of political competition under unified government. This is because many states only require a majority vote to invoke cloture and stop debate. That means that for those states, the cloture measure is always a 1, because cloture can always be invoked by the legislative majority party.

3.5.3 Economic Effects

In order to measure economic effects, I gathered data on local and county bond ratings and prices for 1970-2012 from SDC Platinum, a commercial finance database.

The database contains 478,313 local and county bonds from 53,125 unique issuers. Following the convention in the finance literature (Butler, Fauver and Mortal, 2009), I translated the ratings to numerical values, in which a rating of "D" is 1, and a rating of "AAA" is 20. I drop all values that were not rated.

Figures 3.4 and 3.5 show the average bond rating over time. Many of these are small municipal bonds that are not rated by Standard and Poor's. Of the 478,313 local and county bonds, 165,096 had ratings.

The best way to measure interest in the SDC database is with the net interest cost of each bond.⁸ Of the 478,313 bonds in the dataset, we have the NIC for 144,789. As is clear from Figures 3.6 and 3.7, they are well below 20 percent on average over the time period of interest.

3.6 Methodology and Findings

The analysis proceeds in three steps. First, I predict the probability that a state passes a law in the first place. My unit of analysis is state-years, and I include data from all state-years from 1966 to 2011. Secondly, conditional on legislative action happening in a given year, I predict the strength of the law based on political conditions. Finally, I examine the economic impact of increased whistleblower protections by conducting an interrupted time series analysis on state, county, and local bond prices before and after changes occurred to that state's legal framework.

3.6.1 Predicting adoption of a law

Hypothesis 1 predicts that a law is more likely to be adopted under divided government than unified government. To test this hypothesis, I estimated the following fixed-effects model:

$$Pr(A_{sy} = 1) = \beta_1 D_{sy} + \beta_2 P_{sy} + \beta_4 (D * P)_{sy} + \beta_5 (R * D) + \beta_6 (R * P) + \gamma_s + \epsilon_{sy}$$

Here, A is whether a law was adopted in a given state in a given year, D is divided government, P is one of the political competition specifications above, R is a Republican governor (which, depending on unified or divided government, gives us

⁸The net interest cost (NIC) is calculated as a percentage. It is the total interest payable over the life of the bond plus a bid discount (minus a bid premium), all divided by the sum of individual principal payments, multiplied by time to maturity. The underwriter that submits a bid with the lowest NIC generally wins the bidding process (Nauss and Keeler, 1981). Butler 2009, using a similar database, used "Yield to Maturity", but the NIC seems more appropriate, given that it captures the underwriter's assessment of risk in buying from the issuer and selling to investors. Moreover, NIC is a function of yield, but NIC was more often reported than yield in the SDC database.

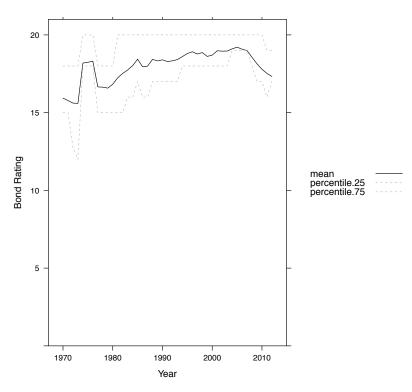


Figure 3.4: Average bond rating over time. Black line is the mean, and dashed lines are 25th and 75th percentiles, respectively

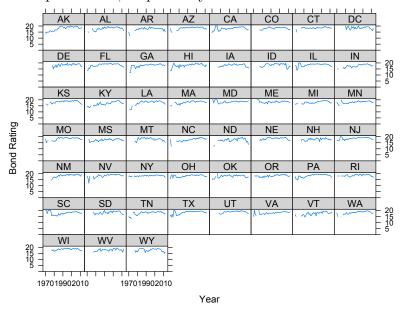


Figure 3.5: Average bond rating over time, by state.

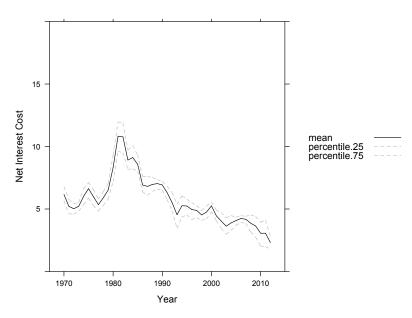


Figure 3.6: Average net income cost over time. Black line is the mean, and dashed lines are 25th and 75th percentiles, respectively

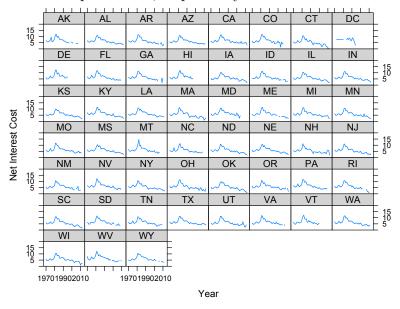


Figure 3.7: Average net income cost over time, per state.

the legislative majority party). State fixed effects, γ , are used for all specifications. I use ordinary least squares to estimate the probability of the law's passage.⁹

⁹I prefer ordinary least squares for this analysis, because the interpretation is much more straightforward than for logit. The logit results are identical.

Table 3.3 presents OLS results on political conditions and the adoption of a state's first whistleblower statute. It seems that divided government has a small and notconsistently estimated impact on the probability of adoption in a given year. The best-measured estimate is 3\%. The percentage of seats held by the legislative minority party works against adoption of a new whistleblower law, all else equal. But when we look at high levels of legislative competition within unified and divided government, we see that high levels of competition under unified government do indeed lead to adoption of a law, as do high levels of competition under divided government, at 12%and 8% respectively. The former result is predicted by theory, but not the latter. The finding on divided government and high legislative competition in the form of no override is counter-theoretically positive, implying a higher likelihood of adopting a first whistleblower law at a time when theory would predict a weaker law be adopted (and therefore, perhaps a lower likelihood of a law's adoption anyway). It is only precisely estimated in one specification, however. The party of the governor and legislative majority do not predict a higher likelihood of adoption of a whistleblower law.

These models have some statistically significant predictors, but they do not explain much of the variance in the dependent variable $R^2 < 0.8$. Several other currently-unobserved features of the political context could affect the probability that a law will be passed in the first instance, including the occurrence of a recent scandal and judicial action that the legislature wants to overturn or codify.¹⁰

It could also be that the same conditions predict *when* a state will adopt its first whistleblower statute. The data is well-suited to survival analysis, since all states now have a whistleblower law. In other words, the data is not censored. Table 3.4 presents results from a Cox proportional hazard model on the timing of statute adoption.

The Cox proportional hazard model is an attractive model for this analysis because it does not rely as heavily on parametric assumptions as other models I could have used. Its main assumption, that of proportional hazards, is one I am comfortable making, based on Schoenfeld residuals. Those plots for Model 1 are in the data appendix. In Table 3.4, I report both the coefficients and the hazard ratios, or the exponentiated coefficients (in brackets). If the ratio is positive, it indicates that an increase in the variable correlates with an increase the "hazard" that in a given state-year, the government will pass its first whistleblower law. Because from Figure 3.1 we see regional trends, particularly among early adopters, I include regional fixed effects in two of the specifications. They do not change the outcomes much, and so I take this as preliminary and indirect evidence that regional diffusion might not be at play, a theory from the legal literature that I will further explore in continued work on this project.

¹⁰Future versions of this essay will measure judicial action.

Table 3.3: Predicting Probability of Adoption of a Whistleblower Law

	Model 1	Model 2	Model 3	Model 4
Divided Gov't	0.00	0.05	0.03*	0.07
	(0.03)	(0.05)	(0.02)	(0.05)
Leg. Min. Party %	-0.43**	* -0.44**	**	
	(0.10)	(0.13)		
Divided Gov't * Leg. Min. Party $\%$	0.02	-0.18		
	(0.13)	(0.27)		
No Cloture * Unified Gov't			0.12***	0.12^{*}
			(0.03)	(0.05)
No Override * Divided Gov't			0.08**	0.06
			(0.03)	(0.05)
Rep. Govn'r		0.00		0.02
		(0.05)		(0.03)
Rep. Govn'r * Divided Gov't		-0.06		-0.07
		(0.06)		(0.07)
Rep. Govn'r * Leg. Min. Party $\%$		0.27		
		(0.17)		
Rep. Govn'r * Leg. Min. Party $\%$		0.04		
Divided Gov't		(0.34)		
Rep. Govn'r * No Cloture *				-0.02
Unified Gov't				(0.06)
Rep. Govn'r * No Override *				0.02
Divided Gov't				(0.06)
(Intercept)	0.05**	0.04	-0.09***	-0.10***
	(0.02)	(0.03)	(0.02)	(0.03)
State Fixed Effects	yes	yes	yes	yes
N_{\parallel}	2167	2167	2167	2167
R^2	0.07	0.07	0.06	0.06
$adj. R^2$	0.04	0.05	0.04	0.04
Resid. sd	0.27	0.27	0.27	0.27

Ordinary least squares regression with cluster-robust state-level standard errors in parentheses † significant at p < .10; *p < .05; **p < .01; ***p < .01

The Table reveals a few interesting results. From the reported hazard ratios, we see that political competition in the legislature does not predict the timing of adoption alone. The traditional measure of political competition, 0.5-s, operationalized here as

the share of seats held by the minority party in the least competitive house in the state that year. The effect, regardless of specification, is small and statistically significant. Once we control for the party of the governor, legislative political competition has no effect on the time to adoption of a whistleblower law.

Divided government and legislative minority party share of seats interact exactly the opposite of the theory's prediction. Under divided government, a stronger legislative minority leads to a higher "hazard" that a law will be adopted in any given period. A one percent increase in the share of seats held by the minority party corresponds to a precisely measured, and large, increase in the probability that a law is adopted. Before we control for political party, this increase is around 15%. But the real power of the legislative minority party is obvious when we control for which political party it is. I do that by controlling for the party of the governor, using an indicator variable if the governor is Republican. Control for governor party, legislative minority party under divided government has an enormous impact. 11 Under divided government, controlling for the party of the governor, a one percent increase in the legislative minority's share of seats corresponds to a fairly-precisely measured 189% increase in the probability that a whistleblower law will be adopted in that period. It is difficult to explain this outcome in a way that flows from the theory without resort to a possible legislative strategy of passing a law in response to citizen demand, but passing a relatively weak law. We will test this in the next section.

Interestingly, the interactions with governor party are significant as well. Under Republican governors, increasing the size of the legislative minority has a big impact on the hazard of a whistleblower law being adopted, all else equal. This is notably not as big nor as precisely measured when we control for unified or divided government.

Figure 3.8 shows the timing of whistleblower law adoption in relation to the Watergate scandal.¹² It also shows the relationship between two subsets of the data – unified and divided government, with minority party legislative size as the explanatory variable. Here, we see that the probability of not adopting (in the words of survival model, the probability of survival) is higher under unified government than divided government when minority party political competition is the only explanatory variable.

The same analysis conducted with the cloture-override variable provides almost complete overlap with Figure 3.8, though it predicts a slightly higher survival for the

¹¹The impact is so big that I have double and triple checked both this analysis and the underlying data. I have not been able to locate an error.

¹²The big drop in states around 1980 has led some colleagues to comment that maybe the AB-SCAM scandal had a big impact. This does not follow my theory as well, since most of the public officials involved in ABSCAM bribery were elected officials, not appointed officials. It's true that there might be an increase in coverage of whistleblowing violations in the legislative branch after ABSCAM, a proposition I will test in future research.

Minority party legislative size and Unified or Divided Government

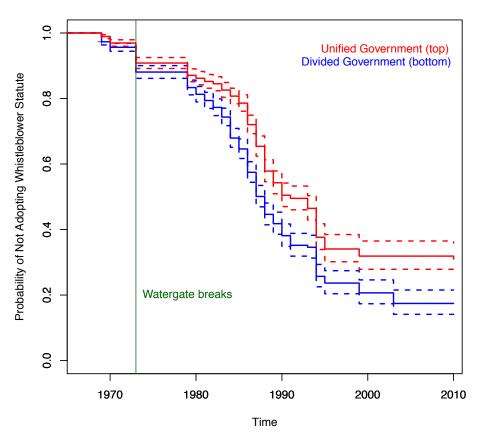


Figure 3.8: Share of seats held by minority party predicts the timing of adoption of a law differently for unified and divided government. Unified government is the red (top) line, and divided is the blue (bottom). Dashed lines are 95% confidence intervals.

unified government group.

Overall, it seems that political conditions do predict the adoption of a whistleblower law and a state's eagerness or delay in adopting a law, though not always in the predicted direction. Divided government consistently predicts a higher likelihood of adoption, sometimes with precision, but it does not predict adoption any sooner. Whether political considerations can predict the strength of the laws once adopted is the subject of the next section.

3.6.2 Predicting a law's strength

Conditional on legislative action occurring, state level political conditions can predict that strength of the law that results. Table 3.5 presents OLS results on the relationship between divided government, political competition, and the strength of a state's whistleblower law. Whereas to predict the adoption of a law, I used the entire dataset until adoption, here, I only use years in which there was legislative action on whistleblower laws. In other words, I predict strength conditional on legislative action on whistleblowing.

I estimate the following regression:

$$S_{sy} = \beta_1 D_{sy} + \beta_2 P_{sy} + \beta_3 (D * P)_{sy} + \beta_4 R_{sy} + \gamma_s + \epsilon_{sy}$$

Here S is the score in a given state-year, D is an indicator variable for divided government in the state-year, P is political competition, which alternates between the two competition measures. R is a vector of partisan variables and interactions, γ and is a decade or region fixed-effect, or both.

The whistleblower law score is still in very early stages of development. The data contains many variables, from statute of limitations to financial penalties for retaliating managers and cost shifting in court, that are not yet incorporated into the score. It is also currently missing almost 30% of the laws, because they were not available on Lexis Nexis or Westlaw and will require more research to obtain. So this analysis is necessarily preliminary.

Based on the current dataset, it seems that political conditions *can* predict the strength of a whistleblower law, though not always in the ways that theory predicted. In particular, as the legislative minority party increases under divided government, the law is predicted to be stronger, particularly once we control for the governor's party. This is the opposite of the prediction in our theory, that under divided government, high political competition would lead to a weaker law.

Party matters not only as a control, but as an explanatory variable. We see stronger laws under Republican governors, but weaker laws when Republican governors face a Democratic legislative majority, which seems to hold when the Democratic legislative majority is quite strong, and does follow from theory. However, it seems that under a Republican governor and divided government, once the legislative minority (Republicans) is strong enough to prevent a legislative veto override, whistleblower laws are stronger. This is an interesting result that helps build toward a partisan theory of transparency. Democratic legislative majorities simply pass weaker laws the stronger their majority is. Republican legislators pass stronger laws, unless they hold a slim majority (with the caveats about the "no cloture" variable mentioned above). Finally, these specifications explain a lot of the variation in the strength of the laws in the dataset $(R^2 > 0.7)$.

This dataset includes not only the first law in each state but all subsequent amendments, and so the first law's strength could have caused increased political competition in the state. In other words, there is probably some uncontrolled-for endogeneity in this analysis. However, among the subset of data that includes only the amendments and not the original laws, the results are in the same direction, but with larger standard errors, given the reduced power.

This early analysis indicates that Hypothesis 1 fares well when applied to data. Divided government does seem to have a small effect on adoption, though it does not predict the timing of adoption or the strength of the law on its own. Legislative political competition alone decreases the probability of adoption in any given time period, reduces the hazard of adoption, and leads to weaker laws. This is the opposite of the prediction in Hypothesis 2. High levels of political competition under divided and unified government predict adoption of a law and the timing of adoption. This was expected for unified government under Hypothesis 4, but it was not expected for divided government under Hypothesis 3 and can only be squared with theory by explaining that even though divided government can't predict the timing of the law, if there is high legislative competition under divided government, we see weaker laws. Unfortunately, our two measures of political competition diverge when we test strength. The share of seats held by the legislative minority party interacts with divided government to predict a stronger law, yet when the minority party share gets high enough to prevent a veto override, then we see weaker laws, as predicted by theory. This will eventually force me to choose between the two measures. Based on Figure 3.3, it seems that the legislative minority party seat share is generally quite low, and so a one unit increase in that explanatory variable might not mean much in terms of actually shaping the laws passed. That pushes me toward the "no override" measure of legislative competition, though more analysis is necessary. And political party, while still quite exploratory and not formalized in a hypothesis, also has some explanatory power. It seems that the parties act as predicted. Democratic majorities in the legislature, if unchecked by a strong majority, pass weaker laws.

Of course, it could be that the probability of legislative action is endogenous to how strong the law will be. This is particularly true, because in other work, I show a link between campaign finance disclosure laws and political campaigning. So not only might political conditions affect the strength of laws, the strength of laws might affect political conditions. This is a thorny problem that must remain unresolved here, but which is ripe for future research.

3.6.3 Economic effects of whistleblower laws

Can whistleblower laws affect bond ratings and yields? The SDC bond data has the date the offer was made. In this Part, I analyze bond yields in the time leading up to and following the passage of a law. If the NIC goes down when the strength of a law increases, I take that as evidence that investor confidence in the security of an investment in the state or local government has increased after the law. Similarly, if the bond's rating goes up when the strength of a law increases, that indicates that the rating agencies have more confidence in the security of the investment.

I conduct the analysis on all types of strengthening and on the subset of the data that involves the extension of whistleblower protections to local employees. I make this choice because most of the bonds are not actually issued by the states, but instead by counties and municipalities. It is stronger protections for those employees that we expect to have the biggest impact on an investment decision. Note that I do not have data on pre-existing protections for public employees at the local level, and so I make assume that the law weakly improves whistleblower protections for those employees.

Preliminary analysis indicates that there is no real cross-sectional relationship between the strength of a state-level whistleblower law and the S&P Rating of a bond issued by a government within the state. Figure 3.9 shows the bivariate relationship.

In Figures 3.10a and 3.10b, I align states by the year they strengthen their whistleblower laws. On average, municipal and county bond ratings are increasing in the years leading up to the whistleblower law, and that decline slows (and in two years, reverses), in the years following the law. The year-to-year differences reflect the changes leading up to the law's adoption, a large increase two years after adoption, and then a large decrease three years after adoption.

Of course, ratings are slow to change, and municipal bond raters at S&P do not focus much on the legal environment, at least with regards to government transparency, when assessing bonds. The NIC might change more quickly, and it might be more sensitive to legal changes. In Figures 3.11a and 3.11b, I repeat the exercise, looking for a change in NIC.

Here we see that NIC was declining – moving in a direction favorable to states – in the years leading up to the adoption of a whistleblower law, and the decline slowed

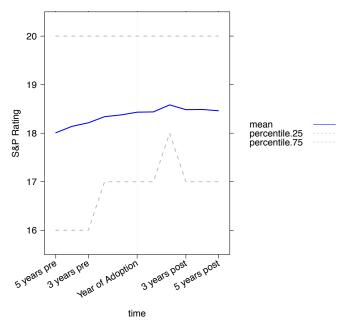
S&P Bond Ratings by State Whistleblower Score

Figure 3.9: S&P Ratings for bond prices by the whistleblower law's strength at the time the bond was issued. There is almost no relationship evident (corr = 0.09)

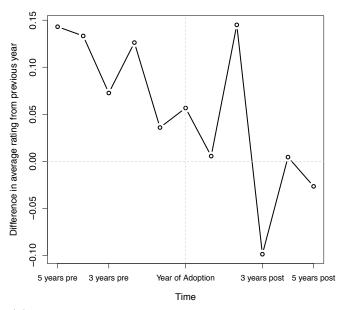
slightly after the law went into effect, briefly reversing, before continuing the decline. Neither the average rating nor the average NIC seems to respond to a state passing a whistleblower law.

One particular arena in which we expect to see an effect is when whistleblower protections are extended to cover the local government themselves. Local and county governments are the issuers of most of these bonds, so when they receive coverage of a state-wide whistleblower law, the theory says that investments in local and county government bonds should be safer. I subset to only the states that extended their whistleblower laws to cover malfeasance in local government over the course of the time series. This subset includes all but 12 states that do not yet cover local employees.¹³ It also includes over 80% of the data, which means the results are not that different than those presented above. They are also not more conclusive. They can be found in the appendix.

¹³Those states are Alabama, Arizona, Colorado, Delaware, Iowa, Indiana, Kansas, Missouri, Nebraska, South Dakota, Texas, Wisconsin, and Wyoming. As mentioned above, I still lack many of the actual laws, though I am sometimes able to determine whether a missing law covered local

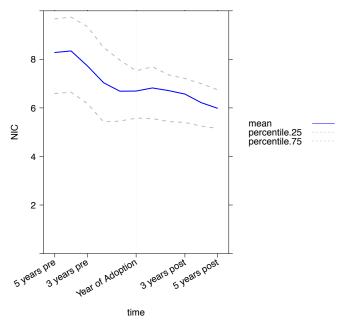


(a) Average bond ratings before and after adoption.

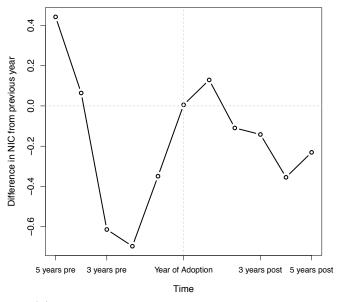


(b) Differences in bond ratings before and after adoption

Figure 3.10: Average S&P rating of municipal and county bonds in states that passed whistleblower laws from five years before their first law to five years after their first law (top). Bottom image shows difference from previous year. Underlying this data are 51,204 observations over 10 years.



(a) Average NIC before and after adoption



(b) Differences in NIC before and after adoption

Figure 3.11: Average NIC of municipal and county bonds in states that passed whistle-blower laws from five years before their first law to five years after their first law (top). Bottom images shows difference from previous year. Underlying this data are 48,149 observations over 10 years.

In Table 3.6, I verify statistically what the Figures show: given the current dataset, the theory cannot provide a good prediction of investor behavior in the wake of a whistleblower law. Here, I use ten years of data before and after and decade fixed effects, but the findings are very similar if I show five years before and after, as I did in the figure, or use year fixed effects. The first two columns are simple analyses of the effect of adopting any whistleblower law, regardless of whether it covers local and county employees or not. Very few relationships are measured with precision. In the first column, we see that the effect on the rating, which we expected to be positive, was negative. The intercept shift created by the law is negative, the equivalent of going from a AAA rating to a AA+. The time trend over the entire period is negative for ratings, once we use year and state fixed effects, and the change in the trend (interaction term) is basically zero, though poorly measured. On the same dataset, we expected NIC to change in a negative direction, and it does, but it is noisy. For the slightly smaller subset on stats that extended state whistleblower protections to cover local employees, the analysis is very similar.

Based on this data, we are largely unable to draw conclusions about the economic effects of state and local whistleblower laws. Controlling for average state and time trends, it seems feasible that these laws have no effect at all, or that they have a detrimental effect. Though most of the intercept shifts are noisily-measured in the predicted direction, the slope changes (interaction term) are in the opposite direction that we predicted. If the whistleblower protections are used by workers to expose malfeasance, then we should observe scandals in the short-term wake of the extension of these protections, which might explain the rating decrease. While I have not found this effect in my own work – scandals did not result after the extension of the Illinois False Claims Act to the local level – other research in this domain could be supported by my findings here. Any exposure of malfeasance enabled by whistleblower laws could result in prosecutions, and previous work has shown a correlation between bond ratings and a measure of prosecutions for public corruption. If anything, my work could provide a mechanism to explain their findings, but without scandal data, I am unable to make the connection between whistleblower laws and prosecutions.

The data set still lacks measurements of possible confounders, particularly financial data that can affect ratings and NIC. If these mixed results hold once I include controls to measure the effects more precisely, the findings raise an important question: if these laws do not have a positive economic effect and indeed could have a negative effect, why pass them in the first place? It could be that the politicians that pass them do not realize that they are ineffective. Or it could be that the politicians know that they are both ineffective and popular among voters, and so they pass them in an attempt to send a signal to their constituents.

employees by using secondary sources or later amendments.

3.7 Conclusion and Next Steps

Theory predicts that the mix of political powers in the legislative and executive branches of government plays an important role in the amount of insulation from political pressures instilled in agency design. This intuition can be extended to the context of transparency laws aimed at exposing and deterring corruption. We expect that the party not controlling the executive branch will have a stronger interest in passing whistleblower laws to expose corruption within the bureaucracy, and that the party that does control the executive branch will not prioritize passing whistleblower laws. In addition, we expect that the party not in control of the executive branch will have an interest in passing *stronger* whistleblower laws, compared to the party that does control the executive branch. Finally, we expect that stronger whistleblower laws will affect investors' perception of corruption within government, and that they will respond accordingly, giving higher ratings to state and local level financial instruments, and demanding less interest on investments within the state when they do invest.

This project is still in its early stages and will evolve more as more data is gathered. Future work on this project will include gathering and coding the rest of the whistleblower laws in the country and gathering the economic indicator variables that rating agencies use in deciding how to rate state and local bonds. For now, it is difficult to draw firm conclusions, though a few patterns are emerging. First, it seems that the balance of powers between the two parties in the executive and legislative branch can explain the adoption and timing of whistleblower laws, though not always in the way that theory predicts. Divided government can predict the probability of a law's adoption, but not its timing. If political competition is good for governance, we are not seeing it in terms of a raw measure of the strength of the legislative minority party and the whistleblower laws produced from those legislatures. High levels of legislative political competition do predict whether a law is adopted, yet on its own, it does not affect the time to adoption, holding everything else equal. However, when it comes to the strength of the law, we see the opposite of what theory predicts: a strong minority party under divided government leads to stronger whistleblower laws. That is the party of the executive branch policing itself, which is not what theory predicts.

While the data still lack controls for economic impacts of whistleblower laws, so far the story is one of no effect. Future analysis of this data will attempt to use synthetic controls to predict the laws' effect on rating and NIC in states that were early adopters.

An interesting question that arises out of the current analysis is that if whistleblower laws truly have no economic effect, then what strategy are legislators pursuing in passing them? Whistleblower laws are generally thought to be popular laws, and

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so the legislators might simply be credit claiming. It seems that they could do more with these laws, such as use them against to expose the malfeasance of their political enemies, and the political conditions analysis might reveal the political game they are playing in passing these laws.

Table 3.4: Time to adopt a state's first whistleblower law

	Model 1	Model 2	Model 3	Model 4
Divided Gov't	-0.16	-0.12	-0.51	-0.43
	[0.85]	[0.88]	[0.60]	[0.65]
	(0.66)	(0.71)	(0.26)	(0.29)
Leg. Min. Party $\%$	-3.87	-3.74	-5.92	-5.67
	$[0.02]^{**}$			
	(0.003)	(0.00)	(0.00)	(0.00)
No Cloture, Unified Gov't	0.35	0.27	0.19	-0.10
	[1.42]	[1.31]	[1.21]	[0.91]
	(0.21)	(0.34)	(0.51)	(0.71)
No Override, Divided Gov't	0.25	0.12	-0.08	0.11
	[1.28]	[1.13]	[0.92]	[1.12]
	(0.42)	(0.66)	(0.79)	(0.66)
Divided Gov't *	2.80	2.75	5.24	4.67
Leg. Min. Party %	$[16.47]^{\dagger}$	$[15.68]^*$	$[189.71]^{\dagger}$	[107.43]
	(0.05)	(0.03)	(0.10)	(0.13)
Rep. Govn'r			-0.31	-0.30
-			[0.73]	[0.74]
			(0.38)	(0.36)
Rep. Govn'r *			0.22	0.16
Divided Gov't			[1.25]	[1.17]
			(0.68)	(0.76)
Rep. Govn'r *			5.83	5.31
Leg. Min. Party %			[339.72]**	[201.81]**
·			(0.01)	(0.01)
Rep. Govn'r *			-6.27	-5.19
Divided Gov't			[0.00]	[0.01]
Leg. Min. Party %			(0.15)	(0.22)
Region Fixed Effects	no	yes	no	yes
\overline{N}	2137	2137	2137	2137
Wald	28(5df)	34(8df)	27(9df)	37(12df)
	p = 0.00	p = 0.00	p = 0.00	p = 0.00
R^2	0.11	0.13	0.13	0.14

Cox proportional hazard model, with coefficients and hazard ratios [brackets].

 ${f P-values}$ calculated with robust standard errors, clustered at state level, in parentheses

 $^{^{\}dagger}$ significant at $p<.10;\,^{*}p<.05;\,^{**}p<.01;\,^{***}p<.001$

Table 3.5: Political conditions and strength of whistleblower laws

				Model 4
Divided Gov	-2.13	-4.95	8.54	
	(2.47)	(3.95)	(6.16)	
Leg. Min. Party %	-33.31^{\dagger}	-40.19		
Ų.	(18.95)	(27.48)		
Divided Gov * Leg. Min. Party %	37.56	122.77*		
Divided Gov Bog. Will. 1 day 70	(25.73)	(49.94)		
No Clature * Haifad Car	(20.10)	(10.01)	0.26	0.00
No Cloture * Unified Gov			8.26	8.02
			(5.69)	(6.74)
No Override * Divided Gov			-1.20	-7.29^*
			(3.64)	(2.98)
Rep. Govn'r		2.62		13.16^*
		(3.92)		(6.25)
Rep. Govn'r * Divided Gov		4.11		-18.65**
Tep. Govii i Bividea Gov		(4.20)		(6.28)
Don Corn'n * Log Min Donty 07		29.97		(0.20)
Rep. Govn'r * Leg. Min. Party %				
		(31.45)		
Rep. Govn'r * Leg. Min. Party % *		-129.59^*		
Divided Gov		(55.77)		
Rep. Govn'r * No Cloture *				-11.67^\dagger
Unified Gov				(7.01)
Rep. Govn'r * No Override *				8.86*
Divided Gov				(3.76)
	52.81***	* 49.76***	* 43.66***	, ,
(Intercept)				
G D. I.D.	(2.32)	(3.57)	(4.71)	(5.45)
State Fixed Effects	yes	yes	yes	yes
N	186	186	186	186
R^2	0.71	0.73	0.72	0.73
$adj. R^2$	0.60	0.62	0.61	0.62
Resid. sd	7.78	7.66	7.69	7.66

Robust standard errors, clustered at state level, in parentheses

 $^{^{\}dagger}$ significant at $p<.10;\,^*p<.05;\,^{**}p<.01;\,^{***}p<.001$

Table 3.6: Economic impacts of whistleblower laws

	Rating	NIC	Rating	NIC
	all data	all data	local only	local only
Predicted direction	(+)	(-)	(+)	(-)
Intercept	23.40*	-6.71^*	23.51*	-7.49^*
	(1.23)	(1.74)	(1.49)	(2.08)
Post Law	-0.92	-2.19	0.42	-1.04
	(1.93)	(3.45)	(2.05)	(4.19)
Time (year)	-0.11^*	0.21^{*}	-0.11^*	0.23^{*}
,	(0.02)	(0.03)	(0.03)	(0.04)
Whistleblower law score	-0.03	0.02	-0.06	0.03
	(0.04)	(0.07)	(0.04)	(0.08)
Post Law * Time (year)	-0.01	0.05	-0.02	0.03
ζ. ,	(0.04)	(0.08)	(0.04)	(0.09)
Post Law * Time (year) *	0.00	-0.00	0.00	-0.00
Whistleblower law score	(0.00)	(0.00)	(0.00)	(0.00)
State Fixed Effects	yes	yes	yes	yes
Decade Fixed Effects	yes	yes	yes	yes
\overline{N}	63433	75036	53727	60364
R^2	0.11	0.55	0.11	0.54
adj. R^2	0.11	0.55	0.11	0.54
Resid. sd	2.15	1.42	2.16	1.46

Standard errors, clustered at the state level, in parentheses

^{*} indicates significance at p < 0.05

Chapter 4

Bounty Hunting: The Limits of Financial Incentives for Reporting Corruption

4.1 Introduction

Financial incentives for exposing illegal behavior are experiencing a resurgence in popularity in the United States. These laws offer a "bounty" to the person who reports corruption or illegal behavior to government investigators or prosecutors. The best-known and most recent bounty laws in the United States are in the False Claims Act, Dodd-Frank Act, and IRS Whistleblower Program. State and local governments have also joined in the bounty game, particularly in the past ten years, and particularly targeting fraud against government. The United States is not the only country to incentivize whistleblowing. Asian countries have these laws as well. Taiwan's bounty is based on the sanction on the defendant. Nepal offers bounties for reporting corruption. South Korea has perhaps the world's most aggressive bounty program, offering bounties for information about many legal violations, from corruption to littering.

Monetary incentives for whistleblowers remain understudied. Anti-corruption activists, legislators, and some scholars have long encouraged the adoption of bounties for whistleblowers. Enthusiasm for these incentives is based on two assumed, but untested, effects of the laws: they work to return money to government, and they deter future illegal behavior. In 2011, the Department of Justice reported recovering \$3.02 billion dollars through the *qui tam* process. Therefore, recoveries under the False Claims Act seem to be large enough to make the law a net gain for government, even assuming that some ill-founded claims by malicious whistleblowers do waste government investigatory money each year. Whether they deter future illegal behavior remains an open question.

There are two conceptually distinct routes by which bounty laws can create deterrence. The first is relatively direct: the laws increase the probability that an illegal act will be detected by adding an incentive for whistleblowers to report illegal acts. That increase in the probability of detection will raise the expected cost of the illegal act, thereby deterring some illegal behaviors (those for which the expected cost exceeds the expected benefit). This is the ex ante role of bounty laws: they should deter bad acts before they are committed. The second route by which bounty laws can create deterrence is less direct and results from the ex post role of the bounty law. Bounty laws help to expose corruption once it is already underway, and that exposure should result in prosecutions. People considering illegal behavior will observe those prosecutions, update their expected probability of being prosecuted themselves if they choose to behave illegally in the future, and be deterred from at least some of their illegal acts. This project empirically tests the assumed deterrence and the two paths of attaining it.

The law I examine is an extension of the Illinois False Claims Act to cover false claims against local government. Focusing on this particular amendment allows me to overcome the problem of selection bias, which is a problem that plagues evaluation of legal changes. Most laws are difficult to evaluate because they were passed by the very people or places that fall under the laws' jurisdiction. Therefore, the change motivating any observed effects of the law – here, reduced incidence of false claims – could be caused not by the law, but by whatever caused the law to be adopted. For example, an increased interest in or commitment to good government could motivate both the adoption of a False Claims Act and the reduction in false claims. In that case, the reduction in false claims could have occurred without the adoption of the law, due only to the interest in good government. I identified all the False Claims Acts suitable for evaluation. Among these, only the 1995 amendment of the Illinois False Claims avoids the self-selection problem. It avoids the problem because it simply extended the state-level False Claims Act to cover fraud against local government, rather than being adopted by the local governments themselves. Furthermore, the extension occurred without any debate or legislative history, giving us only one date around which we expect an effect (the date of enactment, rather than the date the bill was introduced).

I focus the study on false claims and other malfeasance by government officials, employees, and contractors, in order to capture government corruption. Measuring corruption is notoriously difficult, because it is a hidden phenomenon. Therefore, all measures of corruption under-count the incidence of corruption, and most corruption we observe is likely of a different type (discoverable) than corruption we do not observe (well-hidden). Most existing attempts at measuring actual corruption in the United States involve prosecution data, which not only under-counts the incidence of corruption but also is subject to additional bias because the prosecutors themselves

have discretion in which cases to pursue. In an attempt to avoid the problems presented by the prosecution data, I created an original dataset of thousands of alleged acts of local government corruption in Illinois during the 1990s using reports from the Chicago Tribune. While my data collection, like all attempts to measure corruption, certainly under-counts the amount of local government corruption in Illinois, it is an improvement over existing datasets of actual or alleged corruption that use only prosecution data. This is because it relies not only on prosecutions, but also other alleged malfeasance reported in the newspaper, whether from investigative journalism, public investigations, or prosecutions. In other words, it captures a broader set of alleged malfeasance beyond that which prosecutors decided to pursue.

I find no evidence for the deterrence of false claims that legislators expected in passing these laws and activists advertised in pushing for them. In Illinois, the incidence of false claims against local government was declining well before the extension of the Illinois False Claims Act to local government, and the law did not increase the rate of decline. Among acts of malfeasance that aggregated to cost government more than \$1 million – the scale of fraud that the False Claims Act targets – I find that there is little change in the number of false claims before and after the law, but that high-amount corruption is a rare event both before and after the law. While the data is perhaps less well-suited for analyzing the two routes to deterrence, increased prosecution and increased internal reporting of criminal activity, my analysis shows a failure of internal whistleblowing and fails to reveal any increase in prosecution that follows the enactment of the amendment.

Advocates of good government should temper their enthusiasm for whistleblowing bounties as a means of deterring corruption. Rather than prescribe them for more kinds of corruption or illegal behavior more generally (as in the South Korean context), those hoping to deter corruption should realize that bounties are not a guaranteed solution to deterring illegal behavior. While the False Claims Act does seem to return at least some of the money to the government, as it is currently written, the cases that could be deterred are so few that we cannot detect deterrence. Therefore, to the extent that the use of bounty laws is expanded, legislators should take two things into consideration. First, they should consider lowering the bar to receive a bounty for blowing the whistle. Because the False Claims Act works through the court system, it is unnecessarily expensive. We have other models, such as reporting employment discrimination, that have a much lower bar to bring a claim. The False Claims Act could be re-written to lower the bar by using an administrative process to screen claims. Alternatively, the percentage recovery to whistleblowers for reporting lower amounts of fraud could be higher, in order to increase the number of cases that a private attorney would be willing to take through the court system. In expanding the use of a False Claims Act type bounty law, legislators should focus on types of corruption or other malfeasance that involve direct monetary losses to government, like embezzlement, rather than to types of corruption with less direct monetary effects, like nepotism or many kinds of bribery.

The rest of this paper proceeds as follows. After overviewing whistleblower bounties, it provides a review of theories regarding public corruption and privatizing enforcement and how we expect reporting, violating, and enforcement behavior to change in the wake of a whistleblower bounty. Then it presents the data, methodology, and results. It concludes by offering further discussion of the results and some implications and extensions.

4.2 Bounties for Whistleblowing: An Overview

Legislators and activists have encouraged whistleblower bounties in recent years.¹ While offering bounties to whistleblowers is contentious, because it might "detract from the public interest principles of legislation", it also "is one of the few times where whistleblowers are not considered to be victims" (Banisar, 2006).

The first bounty for whistleblowing in the United States was the False Claims Act (FCA).² The FCA has a long history in the United States. Its main bounty provision became law under President Lincoln, who was motivated to halt fraud by contractors against the Union Army during the Civil War (Sturycz, 2009). The bounty in the context of the FCA is designed as a qui tam provision. Qui tam is a writ that allows a private individual suing on behalf of government prosecutors to receive part of the recovery.³ Under the FCA, false claims whistleblowers (called "relators" in the qui tam context) can receive up to 30% of the government's recovery for false claims that they report. Since its 1986 amendments, which brought the bounty provisions back after almost a century of decline, relators receive 15-25\% of the government's recovery for reporting the fraud and 25-30% of the government's recovery for both reporting and winning a civil case on behalf of the government if government prosecutors decline their chance to pursue the case. When the FCA amendments of 1986 and 2008 were under consideration in Congress, both legislative reports talked about the power of the FCA to deter fraud. For example, the Senate report for the 1986 amendments stated that "[a]lthough the Government may also pursue common law contract remedies,

¹See, e.g., Transparency International (2009).

²31 U.S.C. §§ 3729–3733.

³ Qui tam is short for "qui tam pro domino rege quam pro se ipso in hac parte sequitur", which means "who as well for the king as for himself sues in this matter".

⁴A false claim, according to the federal FCA and adopted by most state versions of the FCA, "means any request or demand, whether under a contract or otherwise, for money or property... that — (i) is presented to an officer, employee, or agent of the United States; or (ii) is made to a contractor, grantee, or other recipient, if the money or property is to be spent or used on the Government's behalf or to advance a Government program or interest.... " (31 U.S.C. §§ 3729(b)(2))

the False Claims Act is a much more powerful tool in deterring fraud."⁵

More recent laws include bounty provisions as well. The Securities and Exchange Commission offered an insider-trading reporting bounty of up to 10% of civil penalty recoveries from 1988-2010, though "the primary utility of this program [was] its ability to reveal the unsuccessful and unappealing features of would-be reward systems." (Feldman, 2010).⁶ No more than seven bounties were paid over the two decades, and five bounties were denied during that time period (U.S. Securities and Exchange Commission, Office of Inspector General, N.d.). In the years after the financial collapse, the National Whistleblower Center was vocal in its push for bounties to deter corruption, saying that "[i]f federal, state or local governments are serious about detecting or preventing waste, fraud and abuse, laws must be enacted which reward, encourage and protect whistleblowers." (Kohn, 2009).

Starting in 2011 the SEC began implementation of the Dodd-Frank Act,⁷ which has a revised bounty program. The modified "whistleblower reward program" has received a lot of attention from banks, the bar, and scholars. Section 922 of Dodd-Frank provides that 10-30% of the amount collected by the government in monetary sanctions over one million dollars. It claims that the bounty serves the government's interest "in deterring violations of the relevant securities laws." In addition to the drafters' optimism on the ability of the Dodd-Frank bounty program to deter violations, scholars have been largely optimistic on the program's ability to "generate tips" (Blount and Markel, 2011).

Another recent bounty program is the Internal Revenue Service's Whistleblower Reward program, which rewards those who provide "specific and credible information" about noncompliant taxpayers. It was enacted in 2007 and made its first payment in 2011.⁸ Before 2006, the IRS had formally possessed the authority to offer bounties since 1867, but that authority was discretionary and almost never used. Perhaps because it was only a change in the amount of discretion allowed to the IRS in rewarding whistleblowers, the IRS whistleblower law received less scholarly attention than the amendments to the FCA and the Dodd-Frank law. Nevertheless, reaction was largely positive.⁹

Importantly, all of the bounty target large violations. These laws are "not designed to snag the guppies, but to harpoon the whales", according to Taxpayers Against Fraud (Viswanatha, 2012). As noted, Dodd-Frank requires that monetary sanctions

⁵S. Rep 99-345, July 28, 1986, on returning the *qui tam* provisions to the FCA.

⁶This was under 18 U.S.C. § 78u-1(e), added to the Securities and Exchange act by the Insider Trading and Securities Fraud Enforcement Act of 1988 (ITSEA), Pub L. No. 100-704.

⁷Pub. L. No. 111-203, § 922(a), 124 Stat 1841 (2010).

⁸26 USC 7623(a)-26 USC 7623(b), the latter provision added by Tax Relief and Health Care Act of 2006 (P.L. 109-432).

⁹See, e.g., Ventry Jr (2008).

be at least one million dollars. The IRS whistleblower program primarily targets tax fraud above \$2 million. Dodd-Frank and the False Claims Act have indirect methods of driving up the minimum amount of fraud reported. The False Claims Act, in giving a percentage recovery rather than a flat rate, and requiring that civil litigation be filed as part of the *qui tam* process, results in a *de facto* requirement that the whistleblower hire a lawyer. Dodd-Frank explicitly requires that any whistleblower who wants to remain anonymous be represented by a lawyer in order to recover. ¹¹

4.2.1 Illinois False Claims Act

Throughout the 1990s, only seven states actually had FCAs, and the majority of state-level FCAs that existed were aimed at Medicare and Medicaid Fraud.¹² Illinois and California are the only two states that had general FCAs that were not extremely restricted (Barger Jr et al., 2005).

The primary bounty law under investigation in this project is the Illinois FCA.¹³ Its content mirrors the federal FCA so closely that interpretation of the federal FCA is viewed as persuasive for state courts' interpretation of the Illinois FCA. The Illinois FCA was adopted in 1991, just five years after the important 1986 amendments of the U.S. FCA. The Illinois legislature amended the Illinois FCA, effective August 10, 1995, explicitly empowering the state's attorney general to pursue false claims by "any person" in the state.¹⁴ This amendment effectively extended the powers of the state attorney general to pursue fraud against local governments.¹⁵

 $^{^{10}\}mathrm{An}$ attempt to lower the amount to as little as \$20,000 failed. See H.R. 1591, 110th Cong. § 543(a) (2007) (Mar. 29, 2007).

¹¹Pub. L. No. 111-203, § 922(a), 124 Stat 1841 (2010)

¹²The list of states that adopted FCAs before the year 2000 is as follows. General FCA: California, Illinois, Florida and Nevada, but in the FCAs of Florida and Nevada, public employees were forbidden from being relators. For anti-corruption purposes, this is counterproductive, since people most likely to observe false claims by government officials are those inside of the government. Specific FCA (health care): Louisiana, Tennessee, Texas. In the early 2000s, many more states adopted statelevel FCAs, in part as a response to section 6032 of the Deficit Reduction Act of 2005, which requires that states pass FCAs in order to receive recovery on Medicaid fraud in their states.

 ¹³740 ILCS 175/1 (1991), originally called the Illinois Whistleblower Protection and Reward Act.
 ¹⁴1995 ILL. ALS 260; 1995 ILL. P.A. 260. Introduced January 18, 1995, passed by the House on April 24, 1995, by the Senate on May 12, 1995, and signed by the Governor August 10, 1995 (effective immediately). 1995 Bill Tracking IL H.B. 315.

¹⁵The language of the law is contradictory, but the end result is to cover fraud against local governments. The amendment does three things. First, it changes the definition of "state" to include any local or university governing bodies that opt into the protection. Second, it extends the power of the attorney general. Illinois courts have struggled to interpret this clause, most recently as it applies to universities. When a defendant accused of defrauding a university argued that the university had not opted in under the first part of the amendment, the court ruled, following federal precedent, that because the university receives money from the state, regardless of whether the

The 1995 amendment was not debated, and there is no legislative history on it. Furthermore, there are no published court opinions during the time of my study. ¹⁶ The amendment seems to have increased the scope of the attorney general's power, thereby covering false claims against cities and counties, without any debate or announcement. According to an interviewee, before the amendment, false claims against cities or counties could be reported to "the attorney general, district attorney, whoever they wanted to call" and would be treated under the common law as fraud or theft of government services. After the amendment, the state attorney general had jurisdiction to bring (or accept from a relator) a civil case to recover treble damages for false claims against local governments, a civil penalty that previously did not exist. Similarly, after the amendment, anyone observing false claims against local government, i.e. by contractors or government officials, was incentivized to relate that information to the attorney general and earn a percentage of the government's recovery.

4.2.2 Two Goals of Bounty Programs

Returning money to government is an important goal, and the IRS Whistleblower Law and False Claims Act,¹⁷ in targeting acts that take large amounts of money from government, could help to return money to government. As previous scholars have noted, "[b]ounty schemes survive ... for one reason: they work. The government recovers millions of dollars annually that it could not have recovered without the

university opted in to the protection, state money was likely involved in the false claim against the university. Because of the reliance on receipt of state funding as an inclusion rule, and because cities receive and spend state funding, this interpretation would logically extend to include false claims against local governments that have not opted into coverage. An interview with a Chicago-based false claims lawyer who helped draft the amendment confirmed that the interpretive unclarity has not manifested itself in the local context, and that local governments have all been included by the 1995 amendment. The third change in the 1995 amendment is that a court hearing a false claims case may award "such sums as it considers appropriate" to local entities and universities that were the victims of false claims, without mentioning whether that entity has voluntarily opted in. (1995 ILL. ALS 260, sec. 4(d)) A 2002 case affirmed that regardless of opting in, to be covered, the local entity or university must only have "some nexus" to state money. (People ex rel. Levenstein v. Salafsky, 2002 Ill. App. LEXIS 1067) The net effect, then, is to cover local governments, even if they have not opted into coverage.

¹⁶A pending Illinois FOIA request will help me pinpoint how many claims were filed over the 1990s, though survey research by other scholars indicates that there were only around 15 per year from 2000-2005 (Barger Jr et al., 2005).

¹⁷The Dodd-Frank bounty law targets a large recovery, but the illegal act itself does not have to cost government money specifically. Other bounty laws exist as well, but have received less publicity in recent years. For example, the U.S. Customs Service has a bounty law as well. It provides up to \$250,000, but not more than 10% of the total recovery, for information leading to recovery of duties. See 19 U.S.C. § 1619(b) (1994).

information provided by informants...." (Ferziger, 1999). While to my knowledge this has not been tested in a particularly rigorous way, the rapid increase in amounts recovered to government after some bounty programs go into effect – particularly the FCA – do seem impressive. In 2010 and 2011, the Department of Justice reported recovering over \$3 billion to government coffers. This was almost certainly a net gain: investigatory costs, including of cases that did not lead to recoveries or were filed with malicious intent by angry "whistleblowers", probably amounted to only a fraction of the recovery amount.

Another goal of these laws is to reduce the amount of illegal behavior in terms of its frequency or likelihood of occurring in the first place. Deterring illegal behavior is a goal independent from returning money to government, because illegal behavior, particularly government corruption, has negative effects apart from financial losses. For example, the Senate Report for the 2008 FCA amendments stated that "fraud erodes public confidence in the Government's ability to efficiently and effectively manage its programs." This erosion of confidence occurs every time there is fraud, not just for multi-million dollar fraud cases. Given that goal, writing laws such that reporting is costly (because the relator has to hire a lawyer) or so that rewards only attach to high-dollar allegations, creates a significant reduction in the frequency of corruption only if corruption is usually a high-dollar affair.

The mechanisms of deterrence created by bounty programs are straightforward. Bounty programs should increase the probability that new false claims will be reported to government investigators and prosecutors. This should generate information that the government did not have, which should result in increased prosecution of ongoing false claims, all else equal. In the next Part, I develop these ideas further, reviewing theory on deterrence of criminal or corrupt behavior and expected outcomes of incentivizing reporting.

4.3 Literature and Hypotheses

The three main actors in any false claims enforcement story are "violators", "relators", and "enforcers". Violators are those who are contemplating committing malfeasance. Relators are those who either know or suspect that malfeasance is happening and could potentially report it. Enforcers are those who have jurisdiction to enforce accountability requirements on the violators. In order for a false claims enforcement reform to achieve its purpose, either the violator chooses not to violate, leaving the relator with nothing to report and enforcer with nothing to enforce, or if the violator chooses to violate, the relator must then choose to report, and the enforcer must choose to enforce. Theories from public administration, law, economics, and sociology all speak to the incentives of these actors.

4.3.1 Violators

The would-be violators are any one who might violate the law in a way that would trigger the bounty provisions. In the case of public corruption under the FCA, this includes any public official, public employee, or quasi-public employee (like a government contractor) who might file a false claim. Laws like the FCA aim to recover money to government, expose ongoing violations, and deter future ones. The economics, criminal justice, and sociology literatures have examined deterrence since Beccaria and Bentham. (Beccaria, 1819; Draper, 2002; Wilson, 1975). The classic deterrence model assumes rational behavior on the part of the would-be violator, presenting the would-be violator's loss function. Knowing that the behavior she is contemplating is in violation of the law, she calculates the probability of detection, the size of the sanction (Becker, 1968), and the certainty of punishment (Tittle and Rowe, 1973; Zimring and Hawkins, 1973). Previous research has found that the certainty of punishment must increase substantially – to around 30% – before deterrence effects attach (Tittle and Rowe, 1973).

Passing bounty laws is a low-cost way for governments to increase the probability of detection. Without increasing investigatory or monitoring expenditures, governments can receive more information about malfeasance within government by effectively deputizing individuals to report malfeasance and protecting them for doing so. This motivation is similar to the well-known "fire alarms" and "police patrols" in political science literature (McCubbins and Schwartz, 1984). Police patrols, or constant monitoring, is expensive. Deputizing individuals to pull the "fire alarm" when they observe malfeasance is much less expensive. Governments choose the "fire alarm" approach when possible, as they do when they pass laws like bounty programs, which encourage individuals to report malfeasance. Because of the increase in information available, anti-corruption laws like the FCA are thought to work ex post to enable enforcement of laws against violators. In the case of the FCA, this ex post enforcement effect enables money to be returned to government. When stories of such ex post enforcement actions become public, they too can deter future corruption.

Bounty laws also act ex ante to deter the violations in the first place by increasing the probability of detection (Rose-Ackerman, 1999). The probability of detection is increased because whistleblowers have new incentives to report illegal activity when they see it. Holding everything else constant, this increase in the probability of detection increases the expected cost of illegal behavior. The ex ante effect of bounty laws should encourage would-be violators to either not offend (because the newly-

¹⁸Others can file false claims as well, such as welfare or medicaid recipients that are not government contractors, but they were already covered by the Public Assistance Fraud Act in Illinois, 305 ILCS 58A-2. Because fraud by recipients of public aid is different from public corruption, and because this fraud was already penalized years before the Illinois FCA, I omit these cases.

raised expected cost will exceed the expected benefit in at least some cases), choose a different crime (substitute), or disguise their fraud more cleverly in an attempt to avoid exposure. In any of these scenarios, we should observe fewer *new* false claims exposed after the Illinois amendment is passed.

The ex ante and ex post effects should work in opposite directions, yielding two expectations:

Hypothesis 1: We should see a decrease in exposure of false claims that are initiated after the amendment was enacted. This reduction, possible evidence of the deterrence effect, could result from increased probability of detection and therefore punishment, a substitution effect toward other crimes, or more cleverly hiding false claims.¹⁹

Hypothesis 2: We should see an increase in prosecutions of false claims that started before the amendment was enacted in the months after its enactment. This expectation is driven by the theorized $ex\ post$ role of bounty laws.

These effects should be amplified among "high amount" false claims, which is the primary target of the FCA, given how expensive it is to be a relator and the *de facto* necessity of using an attorney to meet the requirements of filing a *qui tam* suit under the FCA. In interviews with two experienced attorneys in *qui tam* litigation in Illinois, it was clear to me that they only take very high-dollar cases, as they expect a maximum of around $\frac{1}{9}$ of the recovery (the 15-30% to the relator is divided by around 30% for the attorney's contingency).

4.3.2 Relators

If relators are rational, they balance the costs and benefits of reporting. Corruption reports are most likely to come from inside of the entity where the corruption takes place, either from employees, routine audits, or the victims of the fraud (Comptroller of the United States, 1981). Relators internal to the government, who are best-situated to observe and report false claims, have significant potential costs. These costs include the risk to their jobs and therefore pensions, harassment or retaliation at work, feeling isolated or ostracized (despite not suffering formal retaliation),

¹⁹For more cleverly hiding false claims, however, we have to assume that the rational violator was not already hiding the false claims as carefully as possible before the amendment, which is unlikely, unless increased quality of "false claims hiding" is expensive. It is possible that post-amendment, the violator has to dedicate more resources to hiding false claims, such as paying off would-be relators. However, this increase in resources to false claims should result in a substitution toward other types of malfeasance that can still provide private profit to the public actor. I have tested the data for such a substitution effect and not found it.

and stress that results from reporting malfeasance that they observe.²⁰ Whistle-blower laws reduce the cost of reporting, because they prevent the relator's place of work from retaliating against her. Evidence from an amendment to a federal whistle-blower law indicates that reporting increased after the whistleblower protections were strengthened, though the conclusion is not firm (Miceli, Rehg and Near, 1999).²¹

Benefits to reporting include complying with one's sense of right and wrong, possibly receiving positive press, and, where bounties are available, monetary rewards in proportion to the size of the fraud reported.²² The amendment in Illinois, which increased the pecuniary benefits of reporting for high-amount fraud, should result in more reporting of false claims from internal sources after the amendment is enacted than before its enactment. This is leads to another expectation:

Hypothesis 3: We should observe more reporting of false claims from internal sources after the law goes into effect than before it goes into effect.

4.3.3 Enforcers

In any case of fraud against local government, would-be enforcers are government inspectors and auditors, the investigative branch of law enforcement, and prosecutors.²³ Enforcement requires (1) knowledge of the violation, and (2) the decision by the enforcer to enforce the law in light of the violation, given available material and political resources. Legislation that increases transparency, such as bounty laws in the government context, is designed to make knowledge of the violation more readily available to the enforcer. It helps to solve the government's information problem.

Who has jurisdiction to enforce might also matter. Where enforcement is concentrated at the local level, we might expect to see more corruption at the local level, as enforcers and those they are meant to oversee develop cozy, quid pro quo relationships. This is a worry expressed in institutional design since Madison's Federalist 10 (1787), and more recently by modern scholars (Blanchard and Schleifer, 2000; Ogus, 2004).

²⁰An FBI study found that "whistle-blowers' emotions, including nervous disorders caused by retaliatory actions of employers, 'closely parallel those of violent crime victims." (Stinton (1997) as cited in Ferziger (1999), fn 206).

²¹Whistleblower Protection Act of 1989, P.L. 101-12 (1989).

²²As explained above, the benefit of the bounties is lessened by the cost of legal protection, but with large enough bounties, the benefit still outweighs the cost.

²³Because of the various incentives and jurisdictional concerns that local, state, and federal prosecutors have with regards to which the prosecutorial office handles a case, I investigated them separately as robustness checks and found no state-specific effect. This is unsurprising: some local level fraud triggers federal jurisdiction, some simply does not. Several interviews with prosecutors inside and outside of Illinois indicate that the question of who-prosecutes-what in cases of overlapping jurisdiction is determined by political concerns and resource constraints. These cases are passed to whatever better-resourced entity is willing to take the cases, or whichever entity would be risking less in terms of political capital. This means that they are usually given to the federal prosecutors.

A recent example is the alleged ring of ticket-fixing by New York City police officers for "politicians, prosecutors, clergy members, business leaders, celebrities, athletes and others", the result of a "culture of courtesy" between public figures and public employees meant to enforce the rule of law (Baker and Goldstein, April 19, 2011). Centering enforcement at higher, less-personal levels of government, and introducing inter-jurisdictional competition of enforcement, like that enabled by the amendment to the Illinois FCA, is thought to decrease local corruption (Rose-Ackerman, 1975; Arikan, 2004).

Finally, even though a *qui tam* case is filed in civil court, according to an Illinois judge with whom I spoke (confidentially) about these cases, sometimes a civil case ripens into a criminal case, and sometimes it's the other way around. There are distinct advantages for the government of pursuing a criminal approach, namely in recovering money. Where their liberty is at risk, those convicted of committing crimes will be more likely to stick to the terms of their plea agreements, and those plea agreements might include paying back the money.

This discussion leads to an expectation about how enforcement of local fraud should change after the 1995 amendment.

Hypothesis 4: After the law is enacted, we will see an increase in the probability that an act of fraud at the local level is prosecuted, relative to similar cases that are not covered by the amendment. This is part of the ex post role of bounty laws.

Possible mechanisms for this increase include an increased availability of information to enforcers about violations, the increase in inter-jurisdictional competition among enforcers created by the amendment, or the notion that politically-biased choices in exercising prosecutorial discretion by local prosecutors are more visible after the amendment because of the increased information that results from it.

A key point about all of these expectations is that we only expect the effect for false claims. No other kinds of local government malfeasance had any change in legal treatment around August, 1995. Therefore, for all four hypotheses, we anticipate no change for all local government malfeasance that is not related to false claims.

4.3.4 Contribution of this project

Whether laws aimed at creating transparency with regards to malfeasance actually work is still an open question (Apaza and Chang, 2011). While much has been assumed about the way potential violators and relators respond to bounties, and while the amounts recovered are impressive, to my knowledge, this is the first project to attempt any measurement of a deterrence effect. Similar projects focused on descriptions of whistleblowing activity in government, particularly federal gov-

ernment(Brewer and Selden, 1998), or the private sector (Brewer, 1996), but their methods did not allow a causal inference, because they did not include a baseline category. The inclusion of the baseline category – the local-level malfeasance that is not related to false claims – is what permits causal inference in this project. Without the baseline category, any change we observed in false claims could be explained by a general trend in reduction of all malfeasance. Since we include all local level malfeasance in our analysis, we can see where false claims and other malfeasance behave differently, and we can attribute that to the legal intervention that only targets false claims.

State-level anti-corruption efforts, particularly in the form of corruption-related reporting bounties, is largely uncharted territory. Because most public employees in the United States are not federal employees, but instead state, county and local employees, it is important to understand how these laws affect public employees outside of the federal government.

Finally, while the idea of ex ante and ex post effects of laws is not a new one, to my knowledge they have not been tested together in the corruption context. Because deterrence of corruption is so difficult to measure, it is particularly interesting to isolate the difference in the two effects. Specifically, this paper investigates both the immediate effect that bounty laws have in revealing and putting a stop to existing corruption cases, as well as the subsequent deterrence effect that these laws have in preventing future cases from occurring.

4.4 A New Dataset on Corruption

Corruption is difficult to measure, because it is by its nature a hidden phenomenon. No dataset will capture all corruption over a given space or time. Previous attempts to measure corruption in the United States have relied on counts of prosecution (Goel and Nelson, 1998) and surveys of state officials (Boylan and Long, 2003). These measures are interesting, but they might suffer from endogeneity problems (Alt and Lassen, 2003). The prosecution counts vary across states, but low levels of prosecution do not necessarily reflect low levels of corruption – they can signify corruption of the enforcers as well. One way of getting around this is to hold constant the enforcement body, focusing on federal corruption prosecutions of state officials (Glaeser and Saks, 2006), though even the federal prosecution apparatus has been shown to have some

²⁴This work has been particularly focused on identifying a "public service motivation" among public sector employees. The 1996 study was not published nor made available when requested, but Brewer cites it in later work as a survey of "articles in thirty major newspapers over a seven-year period... [finding] that 70 percent of the whistle blowing incidents occurred in the public sector—a sharp difference from the hypothesized share of 20 percent (based on employment distribution)".

bias over time, depending on the president's political party (Gordon, 2009). Similarly, surveys of state officials give an opinion-based measure across states, but any cross-state comparison incorporates state-level expectations, which are shaped by political culture, about normal or acceptable corruption levels.

For this project, I do not compare corruption "levels" across states. Instead, my inference is based on within-state data. The measure I develop here is based on newspaper data. Newspaper stories will cast a wider net about alleged corruption than prosecutorial data. Prosecutors might decline a case due to lack of resources, lack of evidence, or lack of political will. Newspaper data will still capture allegations that do not result in prosecution. Of course, newspapers have their own set of biases. No media source is politically neutral, and reporting is likely biased toward larger amounts of malfeasance or malfeasance by people who are higher-up in the organizational structure of government, since reporting those stories is better for selling newspapers. Since the main targets of bounty laws are large-scale malfeasance, this bias is probably less damaging than it otherwise might be if I was trying to measure all corruption. Crucially, the inference I make, as explained below, only requires that the bias remain constant over time.

In order to test the hypotheses above, I built an original data set of reports of malfeasance by local officials and quasi-public actors, like contractors. The local malfeasance was committed in Illinois²⁵ and reported in the Chicago Tribune between 1990 - 2000. This date range allows me to analyze trends for at least four years before and after the August 1995 amendment that extended the jurisdiction of the Illinois Attorney General to cover false claims against local government. I have over 7000 articles, from even-numbered months between 1990 and 2000, and all months around the implementation date of the August 1995 amendment. I coded articles from the Chicago Tribune exclusively, because there was no discernible difference in political bias between the Tribune and its largest competitor, the Chicago Sun-Times, over the relevant time period. The coded articles from the relevant time period. The coded articles from the relevant time period.

In the coding process, I gathered data on the story itself, including how it "broke"; data on the alleged perpetrator, including where in the local government she was employed at the time of the wrongdoing; and data on the details of the alleged wrongdoing, as well as any outcomes. More detailed information is available in the

²⁵There were a few cases of cross-border actions in Wisconsin by local level employees in Illinois who were committing crimes in Wisconsin when they should have been at work in Illinois.

²⁶This was a fairly extensive undertaking, taking each of fifteen undergraduate coders eight hours per week for five months. I chose to code every-other month in order to capture most scandals but still finish the project in a reasonable time. Coding every month around the cutoff helps to increase the precision of the estimate.

²⁷This was a result of an editorial change at the Chicago Sun Times in the late 1980s. Coding from both newspapers would not have reduced political bias, in other words.

	Pre-amendment	Post-amendment
False Claim	In the early 1990s, 32 Chicago	A city contractor accepted
	Streets and Sanitation workers	\$200,000 in payment
	were found to be on a "ghost	for construction work on the
	payroll" in which they were	Dixmoor recreation center.
	paid, but did not actually work.	Only \$20,000 worth of
	Some went to the racetracks on	work was completed.
	city time, and one robbed a	
	Wisconsin jewelry store.	
Comparison	After the Chicago Housing	Three tactical officers from
Group	Authority was taken over by	Chicago PD arrested for
	the federal government, audits	shaking down undercover
	revealed that millions of dollars	agents that they thought
	had been stolen or wasted. Audits	were drug dealers. The
	found disappearing refrigerators	officers took $$23,000$ in the
	and repair orders that were voided	shakedowns.
	even though the work was not	
	completed, among other problems.	

Table 4.1: Four stories of local-level malfeasance.

data appendix.

My unit of analysis is person-acts (N=11971), which are clustered by scandals (N=532). I define a person-act as one act by one person. That means that a one-off act of malfeasance by a local official acting alone counts as one person-act. If a one-off act includes more than one person, I code each person's involvement separately. A recurring act of malfeasance, like a repeated series of bribes or extortion, or a repeatedly-filed false claim, would enter the data set each time it occurs. The scandal that occurs when the story breaks is important for structuring the data, and I code that as well.

What kind of acts of local malfeasance did I find in gathering data? Table 4.1 presents four stories, two each of false claims and "other" malfeasance, two before the amendment and two after.

The following tables show the landscape of political malfeasance by local and county actors inside of Illinois. A few interesting patterns emerge. First, we note that fraud is a major problem. While we only have around half of the months from the time period in the sample, we have gathered data on 3877 acts of local fraud (2821 false claims plus 1163 person-acts of fraud that were not false claims). This comprises around 34.2% of all alleged county and local corruption-related malfeasance.

	Local	County	Total
Bribery	3594	391	3985
Nepotism	157	25	182
Fraud (not false claims)	1022	141	1163
Theft Embezzlement	847	160	1007
Extortion	174	22	196
Waste	366	61	427
Endangering Health or Safety	805	240	1045
False Claims	1357	1464	2821
Total	8752	2580	11332

Table 4.2: Descriptive Data: Violations

Table 4.3 describes the scandals and the methods of reporting. Though most analysis will be conducted on a narrower window of time, the stories range from 1990 - 2000. The number accused within each scandal ranges from 1-106, with a mean value of 7.1, and a median of 1. The first two rows of Table 4.3 give a sense of the scandals, and the last 10 rows give a sense of how the newspapers learned about the story. The "internal reporting" variable comes from the rows designated with an asterisk: leaks, whistleblowing to the newspaper directly, police tips, investigations, and what the newspaper describes as "inside sources".²⁸

Who is suspected of malfeasance? In Table 4.4, I divide the data set by the place in government of the person alleged to have committed the malfeasance. While this table would be much more informative if we knew the total number of local and county employees that fit each of the categories, it is still interesting to note that person-acts by contractors comprise only six percent of the dataset. Contractors are often mentioned as particularly likely to file false claims against government, so the fact that they are so rarely reported as committing malfeasance generally might indicate that the focus on contractors for fraud is inappropriate. This is bolstered by a 1981 General Accounting Office ("GAO", now called the Government Accountability Office) report on fraud against federal government. It found that federal employees acting alone were accused of 25.7% of fraud, and federal contractors were only accused of 1.8% of fraud – and when other business entities were included, that number was around 10%. Public employees are far more likely to be caught conducting acts of fraud.²⁹

²⁸Results are robust to excluding investigations in the "internal" variable, but I include it because I risk throwing away data if I exclude it, because many of the stories that cite an investigation as their source likely came from internal reporting.

²⁹Of course, that might mean that it is harder for public employees to hide their fraud, and

	Min	Max	Mean	N. Obs.
StoryDate	2/1/1990	6/30/97	-	11971
MentionOnly	0	1	0.069	11294
InvJourn	0	1	0.058	10818
State/County Grand Jury	0	1	0.011	10818
Fed Grand Jury	0	1	0.255	10818
Citizen Complaint to Gov't	0	1	0.318	10818
Leak*	0	1	0.017	10818
WB to Paper*	0	1	0.04	10818
Police Tip*	0	1	0.002	10818
Inside Source*	0	1	0.009	10818
State or Local Investigation*	0	1	0.281	10818
Rep. by: Fed Investigation*	0	1	0.011	10818

Table 4.3: Descriptive Data: Newspaper Stories and Sources

In Table 4.5, we see that from the initial 11971 observations of malfeasance, most of them result in, at a minimum, an investigation.³⁰ The step from investigation to prosecution reduces our number of observations considerably.³¹ The sentencing stage has again fewer observations. Another interesting feature of this data is that federal prosecutors take a lot of the cases. Federal jurisdiction is no doubt triggered in many of these cases, but concurrent jurisdiction with the state is possible. As was affirmed in interviews, the state hands cases to federal prosecutors whenever the federal prosecutors want them.³²

contractors conduct as much, if not more, fraud but hide it more easily.

³⁰This could be a feature of newspaper data, and it is one of the weaknesses of using newspaper data to measure anything related to crime: newspapers have an easier time reporting investigations. Therefore, the 10368 investigation observations out of 11971 total is an inflated picture of the percentage of allegations that actually get investigated. An assistant Attorney General in Illinois reported following up on around 50% of complaints received through the False Claims process (Barger Jr et al., 2005). The State Auditor in the state of Washington also reports only investigating 50% of complaints received.

³¹I conducted a reliability check on a random sample of Illinois prosecutions against the criminal case database at the Cook County Courthouse, and it seems that the Tribune accurately reported almost all of the prosecutions that resulted in a plea or guilty verdict that were in my sample from Cook County. The Cook County Criminal Case database does not retain cases that were either dropped or that resulted in a verdict of not guilty. I am in the process of gathering prosecution data from the U.S. Department of Justice.

³²I report means here, but because the median can be a more informative number, note that the median fine is \$150,000.

	Local	County	Total
Executive - Elected	647	65	712
Legislative - Elected	1115	9	1124
Executive - Not Elected	1060	307	1367
Legislative - Not Elected	124	4	128
Appointed	421	119	540
Judiciary	32	104	136
Contractor	414	305	719
Law Enforcement	1439	241	1680
General Employee	3483	1391	4874
Total	8735	2545	11280

Table 4.4: Person-Acts of Alleged Malfeasance, by the Suspect's Place in Government

4.5 Methodology and Results

One of the biggest obstacles to evaluating legal reforms is the problem of self-selection. For many reforms of interest, such as the adoption of a government anti-corruption law, the entity that will be subject to the law is the same entity that adopts it. This makes it difficult to discern whether the law causes any observable changes, or whether those changes are caused by a third, unobserved factor, such as a growing cultural distaste for corruption. In situations of self-selection, the change in culture can explain both the passing of the law and the increase in prosecutions.

For this change in the law, the state imposed the reform on the local government. The amendment was introduced in January 1995. An interviewee who was asked by now-Governor Pat Quinn (the Lieutenant Governor) to review the amendment told me that it was a "small amendment with a big impact", but that it was "tacked onto some budget legislation" and passed without debate. There is no legislative history on the amendment at all. It went into effect on August 10, 1995, and based on my interviews, it does not seem to have been anticipated at the local level. This allows us to isolate the August date, rather than the January date of introduction, as the date around which we expect a change in false claims. In other words, the quiet way with which it was passed means that those contemplating false claims could not have adapted to the law before it was enacted.

Furthermore, because it was initiated at the state level, the change was exogenous to local politics, local corruption, and local enforcement. This feature makes it close to a natural experiment. As in a lab experiment, where subjects are assigned to treatment or control status, these local governments were assigned the change in enforcement jurisdiction, rather than choosing it. This makes it possible to interpret

	Min	Max	Mean	N. Obs.
County/Local Investigation	0	1	0.25	10368
State Investigation	0	1	0.19	10368
Federal Investigation	0	1	0.53	10368
County/Local Prosecution	0	1	0.13	6518
State Prosecution	0	1	0.03	6518
Federal Prosecution	0	1	0.75	6518
Plea	0	1	0.33	2648
Guilty/Liable	0	1	0.89	4675
Sentence (Probation Months)	0	180	11.21	1737
Sentence (Prison Months)	0	360	32.59	3517
Fine	0	15000000	51895.57	2925

Table 4.5: Descriptive Data: Outcomes

the changes after the amendment as caused by the amendment, rather than a third factor that could have caused both a reduction in false claims and the adoption of the amendment.

4.5.1 Measuring Change over Time

The primary method of analysis I use draws from interrupted time series and difference-in-differences designs. I analyze two groups of data: false claims cases from local officials over the time period, and other acts of malfeasance by local officials over the time period. I observe false claims cases before-and-after and the comparison group cases before-and-after.

The false claims other malfeasance comparison here, which effectively treats all non-false claims person-acts as the "comparison" malfeasance, ³³ and false claims as the treated malfeasance, holds many features constant. The person-acts analyzed here represent acts by local public officials, employees, and contractors within Illinois. They are all accused of malfeasance of various kinds, and the type of malfeasance they committed is, overall, very similar. In the non-fraud group are acts of bribery, embezzlement, nepotism, theft, extortion, endangering health and safety, and non-violent crimes.

³³It is perhaps most helpfully thought of as a "robustness check" group of acts. It is not, strictly speaking, a control group, because the acts of malfeasance considered are not fraud. However, it is a group for which we do not anticipate the law having any effect. Therefore, differences between the non-fraud malfeasance and the fraud over time will help us to infer whether the law had an effect.

In the rest of this Part, I give what I hope are intuitive explanations of a difference-in-differences design and an interrupted time series design. Readers familiar with those research designs may want to skip to the next Part. A differences-in-differences design is useful because it does not require many assumptions, compared to other designs we might use. The main assumption required is something I can verify. Difference-in-differences designs assume that whatever time trends the two groups followed before the treatment would have continued, but for the amendment, which affected only the fraud cases. In other words, in the absence of the law, the dependent variables under investigation here (number of person acts, internal reporting and prosecution) would have been determined by time-invariant trends, and a year effect, which is common across groups (Angrist and Pischke, 2009). The introduction of multiple observations over time before and after the law helps to establish these trends, moving them from an assumption to something we can verify.³⁴ I also have checked to make sure that the data-generating process – editorial choices and budgetary considerations at the Chicago Tribune – did not change over the time period.

When considering the comparison of any two groups, one of which is targeted by a legal reform and one of which is related to the targeted group but not itself targeted by the law, there are several potential outcomes that we might observe. Figures 4.1 - 4.6 present six different possibilities.³⁵

The basic features of the figures, and trends over time, are established in Figure 4.1. In the picture in Figure 4.1, the targeted and comparison groups are very similar on the outcome of interest over the entire time period, and they do not change over time. The small difference between the two groups before the law goes into effect is the same as the small difference between the two groups after the law goes into effect. The difference in those differences is zero. The law did not have an effect on the targeted group for the outcome of interest.

Figure 4.2 introduces the concept of time trend to the data. Both groups are declining on the outcome of interest over time, but the difference-in-differences is still zero, and the law does not have a differential effect on the targeted group, compared to the comparison group.

In Figure 4.3 shows the experimental ideal. Both the targeted and comparison groups are similar over time before the legal change. Then when the legal change occurs, the targeted group responds by decreasing its outcome of interest, whereas the comparison group remains at its previous level. Here, the effect of the law is obvious and measurable.

Figure 4.4 combines the previous figures, showing a parallel time trend before the

³⁴Multiple observations over time are not strictly required for a differences in differences design, which might have as few as four observations total: one for each group, before and after.

³⁵There are many more possibilities. See, e.g. Campbell, Stanley and Gage (1963); Campbell (1969); Glass, Willson and Gottman (2008).

Figure 4.1: No Treatment Effect. The difference between the targeted and comparison groups is constant over time, and neither level nor slope (rate) of the targeted group changes with the legal change. The lines are moving averages across pre and post periods.

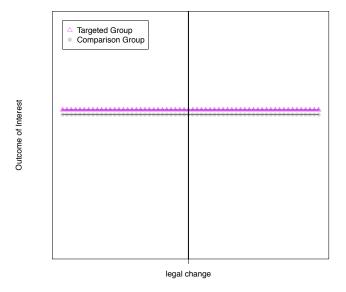


Figure 4.2: No Treatment Effect. The difference between the targeted and comparison groups is constant over time, and neither level nor slope (rate) of the targeted group changes with the legal change. The lines are moving averages across pre and post periods.

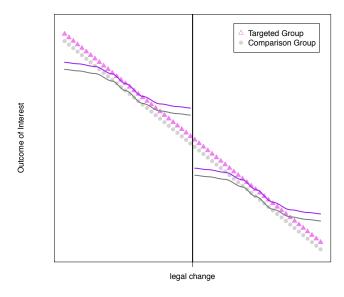


Figure 4.3: Treatment Effect. Here, the comparison group does not change with the legal change, but the targeted group does. This is the experimental ideal. The lines are moving averages across pre and post periods.

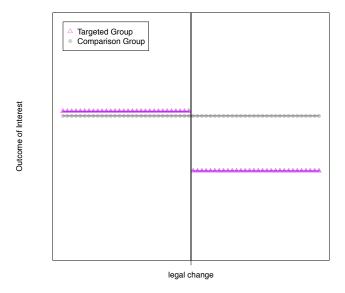


Figure 4.4: Treatment Effect. This is another experimental ideal. The two groups follow parallel time trends before the legal change, and after, only the targeted group is affected (its slope changes). The lines are moving averages across pre and post periods.

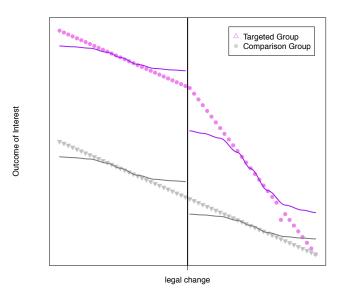


Figure 4.5: Can't Determine Treatment Effect. Here the comparison group is not a good comparison group for the targeted group. We see different time trends before the law goes into effect. Changes we observe after cannot be measured with pre-treatment baselines. Lines are moving averages across pre and post periods.

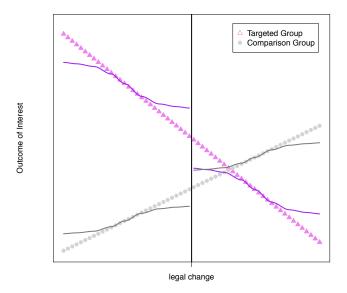
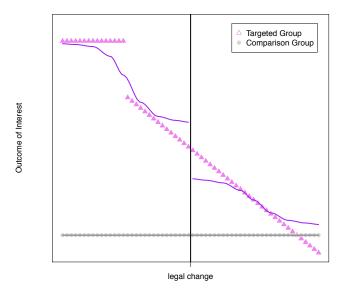


Figure 4.6: No Treatment Effect. The groups start out along parallel time trends, but then the targeted group starts to change well before the legal change. When the legal change happens, the targeted group changes neither level nor rate. Lines are moving averages across pre and post periods.



law goes into effect, and a change in the rate of decrease on the outcome of interest after the law goes into effect. The difference between the two groups after the law goes into effect is smaller than the difference between the two groups before the law goes into effect. That difference-in-differences is a measure of the effect of the law. This Figure also shows an advantage of showing repeated measures over time where the data is available. Depending on which "slice" of time a difference-in-differences design used in the post period, the analyst would capture a different post-legal change difference, affecting the size of the estimate of the law's impact.

Figure 4.5 shows a violation of the parallel time trends assumption in difference-in-differences analysis. Here, the comparison group is increasing while the targeted group is decreasing on the outcome of interest. The law does not affect the targeted group, but if we only had two observations for each group and assumed parallel time trends, we would think that it did.

Finally, Figure 4.6 illustrates another vulnerability of difference-in-differences designs. Here, the change in the outcome of interest by the targeted group began long before the law went into effect. If we only had one "before" and one "after" observation for the targeted group and assumed a parallel time trend for the two groups, we would measure the difference-in-differences to be large. But by taking more observations over time, we see that the law had no effect on the targeted group. There is no discontinuity, or "jump" at the time of the law, and the rate of decrease does not change after the law goes into effect.

4.5.2 Applying theory to data

For all local malfeasance reports, I divide the person acts in my data sample into false claims and other malfeasance, before and after the change in law.³⁶ In the comparison group, "other malfeasance", I included general (non-false claims) fraud, bribery, extortion, theft, embezzlement, waste, endangering health and safety, and nepotism. The results are in the same direction, though less precisely estimated due to fewer observations, when I use only non-false claims fraud as the comparison group.

For the rest of the analysis, I restrict the data in an important way: I omit all acts of malfeasance that took longer than 65 months to be reported in the newspaper from the time that each act (not each scandal) occurred. I do this because I gathered data for 65 months after the amendment was enacted.³⁷ I analyzed the full 10 year

³⁶I confirmed my coding choices of the most common kinds of false claims with two expert interviews. One was a lawyer who helped to write the law and now brings False Claims cases, and the other is a lawyer who worked as an Assistant Attorney General both before and after the law was passed.

³⁷Interestingly, false claims and the comparison group of malfeasance acts both take, on average, about 47 months to be reported in the newspaper from the time of each act.

time period, but I choose to highlight trends for the two years before the amendment was introduced and two years after it was passed. This was a purely stylistic choice that shows the window around the law's enactment more clearly. The data appendix shows the same analysis over the entire time period.

No Evidence of Deterrence for Violators

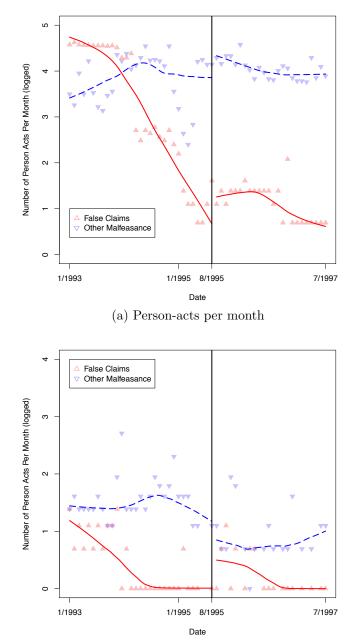
Did the extension of the Illinois False Claims Act work to deter false claims? To answer this question, we first examine Figure 4.7a, which shows the trend in occurrence of false claims, compared to other types of malfeasance, over time.

Figure 4.7a shows that the decrease in the number of false claims occurred in two periods well before the law went into effect in August 1995. The first drop occurred around a year before the law went into effect and the second occurred around the introduction of the bill in January 1995. It is highly unlikely that the introduction of the bill caused that drop. As mentioned above, there was no debate over the amendment. Furthermore, my search of Chicago Tribune articles, which would have turned up any stories on the bill, did not. There is no reason to believe that the relevant before-and-after comparison is around the bill's introduction, rather than the amendment's enactment. One further explanation of the drop around January 1995 remains: Jim Ryan, a "law and order" Republican Attorney General, took office in January 1995. A robustness check (not presented here) shows no change in general malfeasance as a result of his taking office.

While the loess line drops when the law goes into effect, there is actually no additional drop in the number of person-acts per month at the time that the law goes into effect, as shown by the actual data points. This is a case where a pure difference-in-differences analysis in which we would have taken an average before and an average after the law would have shown results that fail to tell the whole story, as described in Figure 4.6. Instead, when we fit a line to assess the change in level (intercept shift = 34.6, standard error = 43.5) and change in time trend (slope change = 0.19, standard error = 0.68), caused by the law, we see that the theory does not hold up. Where we expected negative changes, we see positive, though imprecisely measured, changes after the law goes into effect.³⁸

Figure 4.7a shows results for all malfeasance, including the low-value malfeasance that would-be relators (and their lawyers) would not find it worth their time to pursue. Bounty laws target malfeasance of high-amounts. While my interviewees who bring cases on behalf of relators would not specify the smallest false claim they would relate, I deduced from our conversations that it might be around a million dollars. Figure 4.7b shows the law's effects on false claims of that magnitude.

 $^{^{38}}$ The details of the regression model that produces these results are in the appendix for this Chapter.



(b) Person-acts per month among scandals involving malfeasance that cost the government more than \$1 million

Figure 4.7: Deterrence of Malfeasance Generally and Among High-Amount Malfeasance. Each data point is the logged number of 1+ the number of person-acts in a given month. Vertical line is the month the law went into effect (solid line). Red and blue (solid and dashed) lines through the data are estimated as locally-weighted polynomial regression lines.

Figure 4.7b shows that there are far fewer person acts per month for all kinds of malfeasance that cross the \$1 million threshold. Throughout the time period, malfeasance other than false claims is far more common than false claims, and the difference between them begins to narrow after the law goes into effect. It is basically a null effect. At this level of analysis, we only have 139 person-acts and 15 scandals divided between the four groups (target group pre-amendment, target group post-amendment, etc.), so statistical power is very low (estimated change in level = 0.34.6, standard error = 43.5; estimated change in trend = 0.2 (standard error = 0.68).

Because the number of false claims against government is very low both before and after the law is introduced, we cannot measure with any precision a deterrence effect of the extension of the bounty to cover false claims against local government. However, one important finding from this data is that the false claims that are large enough for the whistleblower bounty of the Illinois False Claims Act to attach are actually few and far between. If deterrence is indeed a goal of the law, this finding should inform the institutional design of bounty laws going forward.

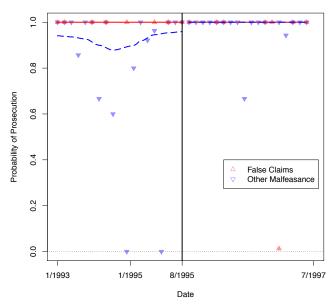
Ex Post and Ex Ante Functions of Bounty Laws

Hypothesis 2 predicted an *ex post* enforcement effect of the law, in which false claims that were ongoing (or completed) at the time of the amendment would be enforced at a rate higher than they previously had under the old legal regime. This *ex post* enforcement effect could independently lead to deterrence of new acts of malfeasance. In order to test the hypothesis, I subset the data to only those person acts that occurred before the amendment.³⁹

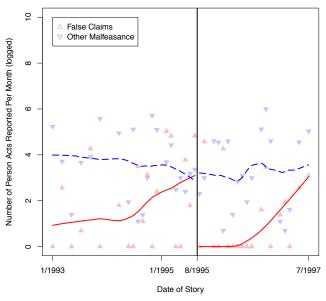
Figure 4.8a shows the probability of prosecution over time of malfeasance that occurred before the amendment went into effect. As is clear from the Figure, prosecution of local false claims was already at the ceiling and could not increase. The implicit mechanism underlying Hypothesis 2 was an increase of exposure of of malfeasance that started before the amendment, after the amendment.

Figure 4.8b shows that the number of person-acts that had already been completed before the amendment does not change after the amendment. When we fit a line, we see that the change in level (estimate = -55, standard error = 10) is precisely measured and in the wrong direction for our theory. The change in slope (estimate = 0.8, standard error = 0.15) is in the right direction for our theory and is precisely measured, but it is undermined by the huge change in level. This is counterintuitive:

³⁹This subset assumes that the amendment applied retroactively. Surprisingly, no one I spoke with could answer whether it did, the law itself does not say whether it applies retroactively. I also found in a 2005 survey report which included a survey from an employee of the Illinois state Attorney General's office a mention that whether the law applied retroactively was an "open question" (Barger Jr et al., 2005).



(a) Probability of prosecution of completed or ongoing malfeasance by the month of the story.



(b) Person acts of completed or ongoing malfeasance by the month of the story.

Figure 4.8: Ex Post Effects of Bounty Laws. Subset is completed or ongoing Person-Acts at time of enactment (acts that started after enactment excluded). Each data is the logged number of 1+ the number of person-acts in a given month. Vertical line is month the law went into effect. Red and blue (solid and dashed) lines through data are locally-weighted polynomial regression lines.

It could be that would-be relators do not hold on to old evidence, and even if they did, we could not observe the effect by an increased probability of prosecution for already-completed person-acts. Crucially, among the acts of malfeasance that really count for these laws – the cases above \$1 million, which would definitely trigger bounty incentives – I am unable to repeat the analysis due to the lack of exposure of "old" malfeasance of that size in the post-amendment period.

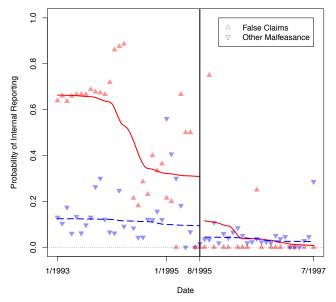
The third hypothesis was that we would observe an increase in reporting of fraud from internal sources, a direct result of the ex ante role of bounty laws. As before, we look at the comparison of all malfeasance followed by the comparison among only high-amount malfeasance. Figure 4.9a shows that whereas internal reporting for non-false claim malfeasance is fairly constant over time, the probability that any given false claim was reported from an internal source declines over time. This is the opposite of our expectation, given the incentives of the law. After clustering standard errors at the scandal level (which I do throughout the project), the estimated change in slope is -1.27 false claims per month (standard error = 1.23), and the change in slope is small (estimate = 0.016, standard error = 0.02).

But of course, the amendment was intended for false claims involving large amounts of money. As before, I subset the data to acts of malfeasance that were part of scandals involving one million dollars or more. The trend over time is shown in Figure 4.9b. Here, an interesting problem with large malfeasance is revealed: those with internal knowledge of big-money malfeasance are disinclined to report it, particularly if it is a false claim. Over the entire period shown in Figure 4.9b, no set of person acts of false claims that aggregated to \$1 million or more was reported from an internal source.

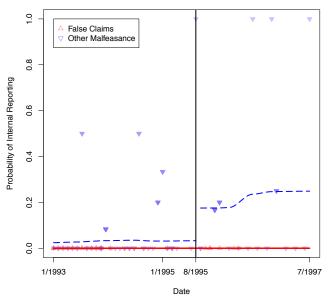
As before, large malfeasance constitutes only a small subset of the data. This time we have reporting information for 118 person acts, which were part of 12 scandals. Predicted slope change and predicted intercept change among False Claims are precisely estimated zeroes. Given that only three of the scandals over the time period for which we have internal reporting data were actually false claims, this result is not that unlikely – none of the three scandals broke because of an internal source. Counter to our expectations in Hypothesis 3, it seems that internal reporting of false claims did not increase after the amendment.

Effects of jurisdictional change for enforcement

Turning to the last hypothesis, we expect to see an increase of prosecution of new acts of local false claims, relative to the comparison group, due to higher levels of reporting (which we did not observe) and the change in jurisdiction of the enforcers. Figure 4.10 shows the change over time. It should be noted that there are no false claims over \$1 million for which we have prosecution data in the post-enactment



(a) Probability that any given act of malfeasance was reported via an internal source.



(b) Probability that any given person act of malfeasance was reported via an internal source, among scandals with more than \$1 million in malfeasance alleged.

Figure 4.9: Probability of Internal Reporting Generally and Among High-Amount Malfeasance. Each data point is the logged number of 1+ the number of person-acts in a given month. Vertical line is the month the law went into effect. Red and blue (solid and dashed) lines through data are locally-weighted polynomial regression lines.

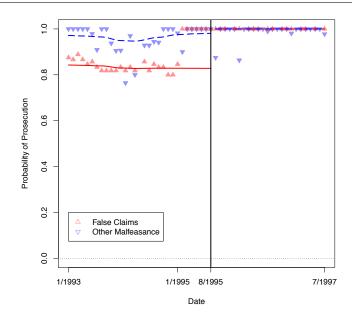


Figure 4.10: Probability that a given *new* false claim is prosecuted, relative to the comparison group. Each data point is the probability of prosecution of person acts of either type in a given month. Dates highlighted with a vertical line is the month the law went into effect (solid line). The red and blue (solid and dashed) lines through the data are locally-weighted polynomial regression lines.

period, so we cannot actually assess the effect on the person-acts most likely to have been affected.

Three things about Figure 4.10 are noteworthy. First, the probability of prosecution of malfeasance in this dataset is quite high across the entire time period. Second, we observe a prompt and definite change in the probability that a false claim is prosecuted, and the change is larger than the change in the comparison group. Third, the change for false claims occurs when the bill is introduced. This could be evidence of local prosecutors anticipating an uptick in prosecutions by the attorney general's office, and similar time-series analysis has called this sort of response an "announcement effect" (Pierce and Bowers, 1981; McDowall, Loftin and Wiersema, 1992). However, in this case, there was no announcement. If any group were to pay close attention to jurisdictional changes like this, it would be the enforcers themselves, particularly given that the new attorney general took office as the bill was introduced. Yet I have found no specific evidence that this was the case, and the numbers are merely suggestive. Finally, there are no person acts in the post-period that are above \$1 million for which we have prosecution data. So this finding is on amounts smaller than \$1 million, which are already unlikely to be affected by the Illinois FCA amendment.

To recap the findings, theory predicts deterrence of false claims caused by the

law, but instead we saw a decline in false claims starting well before the law and continuing through the time of the law. Among malfeasance over one million dollars, we saw that these acts were already so rare that the law had very little to deter in the first place. Theory predicted an increase in internal reporting of false claims, because of the incentives offered to whistleblowers, but instead we saw a decrease in internal reporting among all amounts and no change at all among large amounts of malfeasance. We also expected to see false claims exposed more after the amendment, compared to the comparison group, but we observed no change. Finally, we did observe an increase in the probability that any given false claim is prosecuted, but we lack prosecution data for the targeted set of acts, new acts of false claims above \$1 million.

4.6 Discussion

In terms of accomplishing the goal of deterring future fraud, an important weakness of bounty laws as they are currently written is that they only target very large amounts of fraud. Non-monetary costs of corruption exist regardless of the monetary costs. These non-monetary costs include erosion in confidence in government and loss of social trust. Broader economic effects and human tragedies can also result. For every false claim that is large enough to be accepted by a false claims attorney, there are several smaller false claims that can result in these same non-monetary costs but that do not rise to the level for which a whistleblower could receive an incentive to report. Lowering the cost of bringing a qui tam case, perhaps by increasing the percentage bounty returned for smaller cases, or having an administrative procedure rather than requiring a civil lawsuit, 40 would help lower the bar above which whistleblowers would report. 41

Scholars, activists, and legislators do seem to care about non-monetary costs of corruption, and some of them also seem to have faith in bounty laws for deterring malfeasance. But the evidence shown here indicates that the bounty laws might not help us to reduce the non-monetary costs of corruption, because they are written in

 $^{^{40}}$ For arguments as to why we in the United States should consider using agencies more widely in this sort of instance, see Kagan (2003).

⁴¹Similarly, lowering the required minimum amount for tax fraud or a Dodd-Frank recovery would allow more illegal acts to be caught, though the non-monetary costs of those are likely lower, since they are usually private, rather than public, entities involved in the illegal acts. The main objection to reducing the amount in these cases is that lowering the floor will attract a lot of "junk" cases. The IRS discretionary whistleblower reward apparently attracted a lot of tax fraud accusations against ex-spouses, for example. These types of objections are administrability arguments, and for the most part, they can be drafted around. The minimum amount does not have to be zero, for example, or the bounty could be a flat rate or small percentage, whichever is larger.

such a way that they target only rare events. This is supported by state-level survey data. Between 2000-2005, the Illinois Attorney General's office reported receiving around 15 complaints per year, and recovering only around \$6-7 million per year (Barger Jr et al., 2005). It could be that in Illinois, the law has not yet been publicized well enough to plaintiff lawyers and would-be whistleblowers for the main theorized route to deterrence – increased reporting of corruption – to trigger deterrence. This seems unlikely. Any internet search of "whistleblower and Illinois" results in dozens of links to plaintiff firms. The more likely story, given the data, is that even when a would-be whistleblower finds a false claim, the return on that government recovery, even after treble damages and a per-false claim penalty assessed by the court, will not return enough of a bounty for an attorney to agree to enter the qui tam process. In other words, plenty of fraud is simply beyond the reach of the current state-level False Claims Act.

Even though deterrence of false claims remains an open question at this stage of the project, bounty laws' function of returning money to government is still important. Using bounty laws more broadly in cases in which money can be recovered to government should still be considered. Right now, existing bounty provisions address false claims, tax fraud, customs fraud, and securities fraud (and other malfeasance related to the financial sector). There is no bounty for reporting embezzlement from government, for example. Embezzlement comprises around ten percent of my sample. While these findings indicate that a bounty on reporting embezzlement will not deter the act itself, it probably can help recover some of the money lost via embezzlement to government.

The design of this study makes several contributions to the existing literature in this area. It contributes an innovative identification strategy and a new subnational dataset on corruption, using what should be a more inclusive population of corruption (allegations, investigations, and prosecutions) than studies that use only prosecution data. While the data is an improvement over previous data collections, it is also the source of the main limitations of the study. First, the data is very sparse among large malfeasance. Only two false claims scandals (with 28 person acts) were larger than \$1 million over the two years before and after the amendment went into effect. Better data of the effect of bounty laws could probably be found at the federal level, where contracts are bigger. The problem, of course, is that the U.S. FCA is endogenous to U.S. political culture for over 100 years. Another challenge for this project is that it was surprisingly difficult to glean the source of the story from newspaper data. The negative finding here with regards to internal reporting should be re-examined if better data can be found. Finally, it was difficult to tell from the newspaper

⁴²A design like this around the major 1986 amendment that revived the bounty provision might be the best chance to show it, though that amendment was actively debated and so the time of the expected effect would be hard to pinpoint.

articles when a person-act or scandal was investigated but not prosecuted. A two day visit to the Cook County Courthouse helped to confirm prosecutions that resulted in sentences, but it did not help confirm prosecutions that were dropped or prosecutions that ended in a not guilty verdict. Those are expunged from the defendant's record.

In future versions of this paper, I plan to compare the Illinois case to two cases that are less "clean" in terms of causal inference: California and New York. California adopted in 1987, and New York adopted in 2007, so including these cases brings new challenges in terms of comparing corruption across three decades.

4.7 Conclusion

We have reason to believe that bounty laws like the False Claims Act can result in a net return of money to government. What remained unexamined until this project, and is still an open question at this stage of the project, is whether bounty laws can also work to deter corruption. Using an original dataset of local government corruption in Illinois, this project has shown that there is actually very little corruption that the Illinois False Claims Act could deter, given how expensive it is to bring a case under the current system. Furthermore, in the case of Illinois, we fail to observe the two main routes to deterrence: increased internal reporting and increased prosecution or exposure of completed or ongoing corruption. The former actually shows a large decrease over time. Prosecution of new false claims increases, but the increase occurs around the time that the new attorney general comes into office, after the amendment is proposed.

Writing bounty laws to target high-amount cases of corruption ignores the bulk of corruption that happens in this country, which has other, non-monetary, costs. Those who are concerned about deterring corruption are likely concerned by its non-monetary costs. Legislators should consider lowering the currently too-high bar to blowing the whistle on fraud. Two ways of lowering the bar in the False Claims context are to increase the bounty for reporting smaller amounts, or changing the reporting system by taking the screening mechanism away from the courts and putting it in administrative agencies.

Bounty laws target wrongdoing that involves only very large amounts of money, and they do seem to recover money to government. Recovering money to government is an important goal, regardless of the law's ability to deter future corruption. Expansion of the use of these laws should reflect their ability to recover money and target malfeasance for which there are direct monetary losses to government. In other words, a bounty to incentivize reporting of embezzlement is likely to be more successful than a bounty to incentivize reporting of bribery. The former has a direct, measurable loss to government. The latter very often does not.

Chapter 5

In the Shadows of Sunlight: The Effects of Transparency on State Political Campaigns

Abby K. Wood and Douglas M. Spencer

5.1 Introduction

Americans currently live in a society in which the government makes almost all of its proceedings and decisions easily accessible to anyone who is interested, for whatever reason they might be interested. We can request resumes of appointees, research individual campaign contributions, and receive protection if we report our own officials for their malfeasance. The modern-day presumption of government transparency is so prevalent that it is sometimes easy to forget its recent vintage. This paper investigates the relationship between a particular type of transparency – modern campaign finance disclosure laws – and campaign behavior. We are especially interested in the effect of transparency on political advertisements as well as on the amount and type of money spent in support of political campaigns. Though most campaign finance disclosure laws were enacted in the 1970s, there have been an important set of developments in many states with regard to the growing ubiquity of the Internet. During the 2000s, many states required candidates to file campaign finance forms electronically and also increased the online accessibility of data. During this same time period, the collaborative Campaign Disclosure Project scored all fifty states with regard to the content of their disclosure laws, their online accessibility and usability, and the nature of their electronic filing programs (Alexander et al., 2003). We exploit the between-state variation in these disclosure scores by empirically testing the behavior of political donors to changes in disclosure law and practice. We find suggestive evidence that strict disclosure laws may inhibit the production of political attack ads, and we also find evidence that strict disclosure laws may mitigate the effects of laws that make it easier to spend in elections.

This is increasingly relevant today, in the wake of the Supreme Court's decision in Citizens United v. FEC (CU). In the immediate aftermath of CU, scholars and commentators made sharply divergent predictions about the effects of bans on corporate campaign spending. Nearly all anticipated that corporate money would flood into campaigns, distorting our political process. Underlying the predictions about increased expenditures was an assumption that other election laws and regulations will not change. In fact, Congress responded to CU almost immediately, though it shied away from directly revising the Bipartisan Campaign Reform Act at the heart of the case. Instead, signaling a belief that disclosure would counteract the effects of CU, Congress' first move was to debate the DISCLOSE Act that aimed to decrease the attractiveness of independent expenditures by corporations that are now permitted to spend from their general treasuries. The trend of weakening campaign finance restrictions paired with strengthened transparency requirements is a persistent one, and we observe it at both the state and federal level.

5.2 Campaign Finance Disclosure

In 1910, the United States Congress passed the Federal Corrupt Practices Act.⁴ The FCPA was largely toothless, in part because in drafting it, Congress did not provide for how information on campaign finance would be collected. Consequently,

¹558 U.S. ____ (2010).

²Pub. L. 107-155.

³Title I, sec. 211 would "require corporations, labor unions, and section 501(c)(4), (5), or (6) organizations—as well as section 527 organizations—to report all donors who have given \$1,000 or more to the organization during a 12-month period if the organization makes independent expenditures or electioneering communications in excess of \$10,000." Section 212 states that "if a covered organization makes a disbursement for campaign-related activity, the CEO must file a statement with the FEC certifying that the expenditure was not made in coordination with a candidate, that funds designated by the donor not to be used for campaign-related activity have not been used for any campaign-related activity, and that the spending has been fully disclosed and made in compliance with law." And Section 214 would require the CEO or highest ranking official of a union or organization that makes a disbursement for an independent expenditure or electioneering communication to "appear on camera to say that he or she 'approves this message,' just like candidates have to do now." The DISCLOSE Act (H.R. 5175) was approved by the House of Representatives on June 24, 2010 but the Senate failed to invoke cloture on the motion to proceed to the bill (S. 3628), essentially killing the bill.

⁴2 U.S.C. §241. For more detailed history of campaign finance disclosure laws, see Briffault (2010).

the Act was openly flaunted by candidates. In 1925, the Act was reformed to require that all multi-state political committees make quarterly reports on all contributions of \$100 or more. However, failing to learn from its earlier oversight, Congress did not provide guidance about information gathering, storage, or dissemination. Like its predecessor, the amended FCPA was ineffectual (Sunlight Foundation, N.d.). Not until 1967 were campaign finance disclosure reports actually gathered under the FCPA, and not until 1972 with the passage of the Federal Election Campaign Act was disclosure rendered meaningful.⁵ Nearly every disclosure law since the 1970s is predicated, in some way, on FECA. For a more in-depth examination of the history of campaign finance disclosure laws, see Corrado (1997).

In recent years, courts have rolled back various campaign finance laws, though disclosure is rarely a victim. In fact, in most cases, courts rely on disclosure as a justification for invalidating restrictions on political donations and campaign spending. This emerging doctrine of "deregulate and disclose" motivates our foray into the effects of disclosure laws and whether they have the remedial qualities that courts ascribe to them.

Perhaps the most pithy and celebrated statement on transparency comes from Supreme Court Justice Louis Brandeis whose thoughts on the topic were published in a 1914 edition of *Harper's Weekly*. At the heart of Brandeis' argument was a metaphor that "sunlight is said to be the best of disinfectants" (Brandeis, 1914). In this paper, we explore this exhortation. We ask, to what degree does sunlight "disinfect" the political process? Do strict transparency laws prevent unhealthy fiduciary relationships between government and wealthy individuals or organizations? Or do transparency laws have any effect on spending behavior at all? These questions are motivated by different political theories about the role of transparency in the political process. Campaign finance disclosure laws are understudied in political science, and the strictly normative approach taken in most of the legal literature is ill-suited to evaluating their impact. The approach we take here is different, drawing on a rigorous empirical review of the laws and their impacts to inform our proposals for disclosure laws.

 $^{^5}$ Briffault (2003) claims this is the case because the enforcement mechanism was strong enough to have teeth.

⁶For any general subject in public law, the general trend has been to focus on the federal system. Electoral institutions are no different. Primo and Milyo (2006) is a rare exception, though their focus is on public opinion and government performance, rather than campaign finance. One recent book covers several aspects of state-level electoral institutions, but it leaves disclosure laws unexamined. (Cain, Donovan and Tolbert, 2008)

5.3 Theories of Disclosure

Despite deep ideological disagreements about how money is raised and used in political campaigns, disclosure laws consistently find strong support from across the political spectrum. A classic example is found in the *Citizens United* decision. Whereas the Supreme Court invalidated the federal ban on independent expenditures from an organization's general treasury on highly partisan grounds, the Court almost unanimously agreed (8-1) that disclosure requirements for entities who fund independent electioneering communication are constitutionally valid under the First Amendment.⁷

While the case for disclosure is "almost certainly overstated" (Briffault, 2003), its potential advantages have allure. Disclosure directly increases information that is available to the general public, arguably combats corruption, and possibly reduces the amount of money in politics.⁸

5.4 Effects of transparency laws

The existing literature on transparency laws in general and campaign finance disclosure laws in particular focus on the informational function of transparency laws, which work to deter corruption. The U.S. Supreme Court in *Buckley v. Valeo* explained both roles of transparency laws:

"First, disclosure provides the electorate with information 'as to where political campaign money comes from and how it is spent by the candidate' in order to aid the voters in evaluating those who seek federal office. It allows voters to place each candidate in the political spectrum more precisely than is often possible solely on the basis of party labels and campaign speeches. The sources of a candidate's financial support also alert the voter to the interests to which a candidate is most likely to be responsive, and thus facilitate predictions of future performance in office. Second, disclosure requirements deter actual corruption and avoid the appearance of corruption by exposing large contributions and expenditures to the light of publicity. This exposure may discourage those who would use money for improper purposes either before or after the election." 9

⁷Only Justice Thomas dissented on the point of disclosure, arguing that the First Amendment protects anonymous free speech and that disclosure might lead to retaliation by one's political nemeses.

⁸There is a countervailing position, espoused by Ackerman and Ayres, that anonymous donations would have greater anti-corruption benefits than disclosure, because officeholders would not know who paid for their campaigns and therefore would not bend policy to repay big donors with beneficial policies (Ackerman and Ayres, 2002).

⁹424 U.S. 1 (1976) (per curiam) at 66-67. The court includes a third role, which is basically

We identify an additional function, which is the instrumental role played by campaign finance disclosure laws in a jurisprudential world that conceives of campaign spending as constitutionally protected. By this reasoning, disclosure laws are instrumentally aimed at reducing the amount of money in politics. We evaluate each of these theories in turn.

5.4.1 Deterrent Role of Disclosure

Transparency laws are particularly useful when unethical, illegal, or market-distorting behaviors are difficult to detect and therefore difficult to enforce. When governments face a challenging regulation problem, such as health care fraud, endemic bribery in government, or "bad behavior" on the part of candidates or donors, transparency laws are often more feasible to pass and enforce than laws regulating the "bad behavior" itself. Because such "bad behavior" is usually hidden from public view, the role of transparency in these contexts is to increase the probability of detection of the behavior, which then serves to deter the behavior in the first place (Rose-Ackerman, 1999; Becker, 1968). The increase in visibility then allows for oversight and detection with minimum effort on the part of the overseer. ¹⁰ Increased transparency makes it easier for the overseer to bring adverse consequences on the actor committing the "bad behavior", which should result in at least partial deterrence of that behavior.

What would qualify as "bad behavior" in the campaign finance context? We think the list is comprised of behavior that donors and candidates will happily conduct as long as their identity is protected, but will hesitate to conduct once their identities become public. We consider two behaviors as fitting this description: first, actually violating campaign finance rules; second, funding attack ads. Actual violations of campaign finance rules are difficult to observe and outside the scope of this paper.¹¹ However, the tone of political advertising is measurable and is the basis of our first hypothesis:

Hypothesis 1: Strengthening disclosure laws before an election will reduce the percentage of "attack ads" in state-level elections.

enabling enforcement of these laws against those who break them, but we think that this role of disclosure laws serves to augment deterrence, so we do not include it here.

¹⁰This is a similar logic to the creation of procedural constraints discussed by McCubbins, Noll and Weingast (1987) in the congressional oversight context.

¹¹A simple difference-in-differences analysis over time of all reported campaign finance violations could reveal a change in the trends before and after a change in transparency law. We have not gathered data on campaign finance violations, however, and leave this question to others to explore.

5.4.2 Instrumental Role of Disclosure

Deterring "bad behavior" is only one reason that we might see campaign finance disclosure laws. There might also be an instrumental use of transparency laws to reduce the amount of money in politics. As early as 1962, the President's Commission on Campaign Costs claimed that "full and effective disclosure is the best way to control excessive contributions on the one hand and unlimited expenditures on the other. Publicity has a cleansing and policing power far more powerful than that of limitations." In recent years, the courts have made regulating the amount of money involved in campaign finance difficult by slowly deregulating campaign finance. As a result, at least partly under the belief that transparency laws erect a barrier to campaign finance, interest groups, presidential commissions, and legislators have called for stricter disclosure laws.

In *Citizens United*, the Court invalidated a ban on corporate independent expenditures. At the time of CU, twenty-four states had a ban on corporate independent expenditures, and some of them prevented independent expenditures from other groups, like unions, as well. Even among states with bans, some independent expenditures could occur in the form of individual expenditures (at a minimum) or other group-based expenditures, like from 527. The opinion in CU was interpreted by most states that had bans as invalidating their bans on corporate *and* union expenditures.

Figure 5.1 plots the overall independent expenditures on state races in eighteen states before and after *Citizens United*. The difference in IE spending between states whose IE ban was invalidated by the law (12) and states who never had an IE ban (6) is smaller after the CU decision than before. The gap between the interstate differences before and after the law is a naive measure of the "treatment effect" of *Citizens United* and suggests that the CU opinion led to spending increases on the order of 100%. Note that these preliminary findings evaluate all state races with no controls. Regardless, the degree to which IE spending changes over time is due, in part, to donor elasticity. Our second hypothesis builds on this theory of donor elasticity by identifying the effect of an additional transaction cost of strict disclosure laws, holding constant a state's ban on IEs:

Hypothesis 2: Holding constant a state's ban on independent expenditures, stricter disclosure laws will decrease independent expenditures in a state-wide election campaign.

The underlying theory is one of a second-best solution for addressing money in politics. In an environment in which outright IE bans are permitted, we anticipate that the bans do far more work to restrict independent expenditures than disclosure associated with such expenditures. When the direct pathway of a ban is unavailable,

¹²Commission on Campaign Costs (1962) in Briffault (2010).

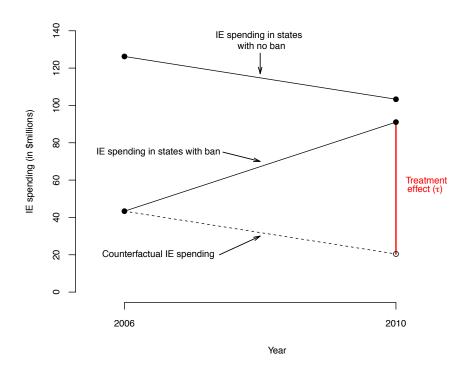


Figure 5.1: Raw difference-in-difference (with no controls) of independent expenditures (IEs) in states with and without a ban on corporate IEs before and after *Citizens United*. Data source: *National Institute on Money in State Politics*. Assuming parallel time trends, the treatment effect (marked by τ) represents the naive treatment effect of *Citizens United*. This figure is taken from Spencer and Wood (2012).

disclosure laws offer an alternative mechanism and play an increasingly important role in reducing money in politics.

5.5 Our Data

Unfortunately, the data to measure our hypotheses are frustratingly incongruous. Many careful independent researchers have compiled important data related to disclosure, campaign spending, political competition, and advertising. These data, however, are often not available in overlapping years. This means that we are unable to systematically evaluate relationships between our variables of interest over time, and our analysis below is limited to particular cases where data are available. See Figure 5.2 for our summary of the data we have used so far. In fact, the only years for which we have multiple data sources are 2002-2008, and in many cases there are holes that prevent meaningful analysis. For example, independent expenditure data

is not available before 2006, state disclosure scores are not available in 2006, and advertising data is not available in 2008.¹³ This fact alone precludes our analyzing more than two successive gubernatorial elections as we are always limited to just two time periods. The rest of this section describes data sources for the main explanatory and dependent variables.

5.5.1 Disclosure

Disclosure scores are available for all fifty states for the years 2003-2008 via the Campaign Disclosure Project.¹⁴ The scores are calculated using a 300-point system awarded in four categories: (1) disclosure laws, (2) electronic filing programs, (3) disclosure content accessibility, and (4) online usability. The points are converted into a letter grade, and only the letter grade is reported. We converted the letter grades into an ordinal numeric scale (0 for 'F' and 11 for 'A').

5.5.2 Advertising

The Wisconsin Advertising Project has studied political advertisements in the 100 largest media markets in the United States every two years since 2002 and in the largest 75 media markets in 1996 and 2000. Unfortunately, data are not made available for four years after each election, so the most recent available year is 2008. Advertisements are coded across numerous variables: length in minutes, sponsor, whether the primary purpose is to attack a candidate, etc. We are specifically interested in the proclivity of sponsors to run attack ads. In Table 5.1 we report cross tabulations of the attack ad variable on each of the four ad sponsor types: candidates, parties, independent groups, and independently funded ads that ran in coordination with a campaign.

5.5.3 Independent Expenditures

Independent Expenditures data are available from National Institute for Money in State Politics, which has an ongoing project to collect independent expenditures. They currently have data from 2006 - 2010 for 18 states, chosen mostly because of the ease of access of information from those states. They are therefore not randomly

¹³One important finding of our research is that state campaign finance data are in need of improvements. In many cases, states just do not make important data available to the public. Nevertheless, some important projects are currently underway; for example, the National Institute on Money in State Politics project to compile every independent expenditure in all 50 states going back to 2006. Researchers are in desperate need for more projects like this one.

¹⁴See http://www.campaigndisclosure.org/

		Candidate	Party	Ind. Group	Coordinated
1	N	213,963	49,228	28,463	463
1	Percent	.73	.16	.9	.1
2	Attack	.22	.60	.71	.70
	Not attack	.77	.40	.29	.30

Attack Advertisements

Table 5.1: Source: Wisconsin Advertising Project. Data represent the percent of political advertisements whose primary purpose was to attack a candidate. Numbers are reported for all gubernatorial races in 2000, 2002, 2004, and 2008. In Panel 1, we report the breakdown of attack ads by the four specified sponsor types. In Panel 2, we report the cross tabulation of attack ads by the four sponsor types.

selected into our sample. The data contains expenditure-level data, which we use to aggregate up to the state-election level.

5.6 Methodology

To measure the effect of strengthening campaign finance transparency laws on the incidence of attack ads, we examine the effect of disclosure laws on the incidence of attack ads over time. Specifically, we are interested in the effect Y_i of strengthening campaign finance transparency laws such that

$$Y_i = \begin{cases} Y_{1i} & \text{if } T_i = 1\\ Y_{0i} & \text{if } T_i = 0 \end{cases}$$

where T_i represents the treatment of improving transparency laws. The effect of T_i is determined by calculating the difference $Y_{1i} - Y_{0i}$. Because we are limited to observed differences in attack ads, and because transparency law strength was not randomly assigned to states, we face a selection problem and must make additional assumptions, as we discuss below.

We employ a difference-in-differences identification strategy where Y_{1ast} is the average number of attack ads as a fraction of total ads, a, in state s at time t in states with bans on direct corporate independent expenditures, and Y_{0ast} is the average number of attack ads as a fraction of total ads, a, in state s at time t in states with

¹⁵This is also the probability that any given campaign ad is an attack ad.

no bans. To estimate Y_{ast} , we use the following regression

$$Y_{ast} = \alpha + \gamma T_s + \delta 2008_t + \lambda (T_s \cdot 2008_t) + \theta W_{st} + \epsilon_{ast}$$

$$(5.1)$$

where 'T_s' is a dummy for states with a change in transparency laws, '2008_t' is a time dummy that equals 0 at the 2004 election and 1 for the 2008 election, W_{st} are a set of control variables (see below) and ϵ_{ast} is the error term. We interpret this model to solve for the population difference-in-differences where λ is the causal effect of interest and

$$\lambda = \{ E[Y_{ast} | T_s = 1, 2008_t = 1] - E[Y_{ast} | T_s = 1, 2008_t = 0] \}$$
$$-\{ E[Y_{ast} | T_s = 0, 2008_t = 1] - E[Y_{ast} | T_s = 0, 2008_t = 0] \}$$

A difference-in-differences approach assumes that the time trend would be the same for the treatment and control groups if the treatment group had not been treated. In our case, we assume that the percentage of attack ads in control states is determined by a constant year effect common to all control states. We further assume that any unobserved confounding variables are time invariant (Angrist and Pischke, 2009). The main feature of state politics that would influence both the incidence of attack ads and a state's propensity to strengthen its transparency laws can be described as political culture. Measures of political culture are inherently difficult, so for the purposes of this analysis, we consider political culture a potential unobserved confounder. However, political culture changes very slowly, and it is not likely to change enough to affect our results in the four years under analysis. Therefore, our main unobserved threat, political culture, is, by assumption, time invariant between 2004 and 2008.

We run a similar difference-in-differences analysis on whether disclosure laws affect levels of money in politics.

5.7 Findings

We are still building our dataset: merging political competition data to spending data, matching Wisconsin Ad data, and waiting for more independent expenditure data to be made available. Nevertheless, we have performed some preliminary analysis.

5.7.1 Deterrence Findings

In order to test whether disclosure laws prevent bad behavior, we conduct a difference-in-differences analysis on the four states in the data that met two crite-

ria: they held gubernatorial elections in 2004 and 2008, and they did not have a ban on independent expenditures. The former restriction was due to data shortages¹⁶, and the latter was because a common source of attack ads is thought to be independent expenditures. With no ban on independent expenditures in either period, the states in our sample can be expected to follow similar trends. The four states that made the cut are Delaware, Utah, Vermont, and Missouri. The first three states stayed at the lowest disclosure scores – 0 and 1 – over the time period. Missouri changed from 4 to 8 between the two elections. Its change was mainly a result of mandatory electronic filing, requiring reporting of contributions and independent expenditures greater than \$10, and improving public accessibility of the information generated by campaign finance disclosure.¹⁷ Califonia Voter Foundation, et. al. (2008) We therefore analyzed the data as a difference-in-differences design, comparing the difference in Missouri in 2004 and 2008 with the difference in the other three states in 2004 and 2008.

The basic findings are shown in Figure 5.3.

The average trend for the control states, shown by the blue line, is basically flat. The average percentage of attack ads in control states in both time periods is very low, from 10% of all ads to 7% over the time period. Surprisingly, the average percentage of attack ads in the control group is always below the average percentage of attack ads in our treated state. In 2004, Missouri's disclosure score was higher than all of the control states combined, at 32% of all ads run for the gubernatorial race, and it had more attack ads than the control state average in 2008 as well (20%).

It is clear that Utah, which had no attack ads in either period, is driving the effect for the controls. Attack ads in Delaware drop even more drastically than they do in Missouri, and the trend in Vermont is parallel, but lower than, the trend in Missouri. Nevertheless, we observe that our treated state, had a noticeably stronger reduction in the percentage of gubernatorial campaign attack ads than the average control state – the difference in differences is 0.09, or 9%. This is suggestive evidence that disclosure laws may inhibit political actors and their supporters from running attack ads.

Conditioning on Covariates

In difference-in-differences analysis, we assume that confounding variables are all time-invariant. The analysis above makes no allowance for other sources of variation in the percentage of attack ads in a gubernatorial election, such as differing costs

¹⁶There was no state-level campaign advertising data collected in 2006, that we are aware of.

¹⁷Grading State Disclosure also cites increased penalties for violating the law, which, seemingly due to timing, were not actually captured by the grading scheme but would have earned it an even higher score.

of running ads, the ad sponsors, and the relative strength of the candidates' treasuries. We are able to observe such confounders, so we now turn to include them in our analysis using regression difference-in-differences including control variables and year fixed effects. Note that we do not include the outcome for the gubernatorial elections themselves, because that could be considered post-treatment. The data for this analysis is from the campaign season itself. The results of those statistical models are shown in Figure 5.2.

Table 5.2: Difference in Differences Analysis of Attack Ads in States without IE Bans

	Model 1	Model 2	Model 3	Model 4
Intercept	0.09	0.12	0.12	0.81**
	(0.10)	(0.10)	(0.09)	(0.07)
Improved Disclosure (Tr)	0.23^{\dagger}	0.23^{\dagger}	0.22^{\dagger}	0.14^{*}
	(0.10)	(0.10)	(0.07)	(0.03)
2008 Election	-0.02	-0.02	-0.03	0.06
	(0.09)	(0.09)	(0.06)	(0.04)
Tr * 2008 Election	-0.10	-0.11	-0.10^{\dagger}	-0.04
	(0.09)	(0.09)	(0.04)	(0.03)
log (est. cost of Ad)		-0.04**	-0.00^{\dagger}	-0.01^{\dagger}
		(0.00)	(0.00)	(0.00)
Dem spend - Rep spend			0.00	-0.00
			(0.00)	(0.00)
IG sponsored ad				-0.81^*
				(0.18)
candidate sponsored ad				-0.73**
				(0.06)
N	76564	76564	76564	76564
R^2	0.04	0.04	0.04	0.31
adj. R^2	0.04	0.04	0.04	0.31
Resid. sd	0.42	0.42	0.42	0.36

Standard errors, in parentheses, are robust and clustered at state level

The included covariates are the estimated cost of the ad, the difference between Democrat and Republican spending in the state, and the sponsor of the ad, which

[†] significant at p < .10; * p < .05; ** p < .01; *** p < .001

¹⁸Future analysis will incorporate more explicitly historical party power within states.

¹⁹The results we present here were conducted using ordinary least squares regression, but they are almost identical using logit regression. We choose to report our results in OLS for ease of interpretation.

is either an interest group or candidate, with party-sponsored ads as the dropped variable. Heteroscedasticity-consistent standard errors, clustered on the state, are reported for the regression estimates. As we observe in Table 5.2, the coefficient of interest, Tr * 2008 Election, indicates that in each specification, the percentage of attack ads in Missouri decreased more than the percentage of attack ads in states that similarly lacked a ban in independent expenditures but had much more lax disclosure laws. While only one of the four has a p-value approaching traditional levels of significance, the findings are consistent in their direction.

Using the limited available data on campaign advertising, we are unable to conclude that the increase in disclosure requirements that we observe nationwide serves to deter bad behavior. The trends are in the right direction, but once we cluster our standard errors, they are indistinguishable from zero.²⁰

5.7.2 Instrumental Role of Transparency

From Figure 5.1, we know that independent expenditures increased after CU. One immediate response from the legislature was to propose campaign finance disclosure measures. At least outwardly, this response seems predicated on the belief that disclosure laws are a second-best solution for reducing money in politics. Bans are expected to keep money out of politics, but once they are ruled unconstitutional, the clamor for disclosure increased.

Do we see that disclosure laws affect the amount of money in politics? Does the strengthening of campaign disclosure requirements serve to mitigate the increases in independent expenditures that we observe after the Citizen's United opinion? To test this question, we analyze independent expenditures in the 2006 and 2010 gubernatorial elections in states that had bans on corporate independent expenditures before the Citizens United decision. Because there are limited number of independent expenditure data available at the state level so far, only two states fit this description: Iowa and Michigan. Iowa had a ban on corporate independent expenditures. Michigan had a ban on both corporate and union expenditures. Because independent expenditures can come from many sources – 527s and individuals, for example – we still expect to see some expenditures in states with corporate or union bans. But because corporations and unions are responsible for so much campaign activity, we anticipate that adding corporations and unions back into the independent expenditure game will increase the level of independent expenditures that we see at the state

 $^{^{20}}$ At this early stage, we have not come down firmly on whether we should cluster our standard errors or not. There is an argument for not clustering – after all, if there is no intra-state correlation over time, we do not need to do so (and the results are all highly significant with p-values of ≈ 0 if we do not cluster). We present this so plainly to the panel in hopes of feedback on this precise point.

level.²¹

In our analysis on independent expenditures and disclosure laws, we search for heterogeneous treatment effects. Here, both states are "treated" by the CU opinion, but we anticipate different treatment effects based on disclosure score. Because both Iowa and Michigan had a ban before the CU decision, we expect their independent expenditures to increase in the 2010 election from their 2006 levels. However, because they have different disclosure scores across the entire time period – Iowa has a score of 3 out of 11 and Michigan is 10 out of 11 – we anticipate that the CU decision will cause a greater increase in independent expenditures in Iowa than it will in Michigan, where the strict disclosure laws work to counter the effects of CU. The change in per capita independent expenditures is shown in Figure 5.4.

We see that Michigan's level of independent expenditures per capita was relatively unaffected by the passage of CU, with a before-and-after mean of 0.78 and 0.79, respectively. Iowa, which had weak disclosure laws, saw a drastic change in independent expenditures per capita, from almost no independent expenditures per capita in 2006 (the mean was 0.05) to over 250 times that level in 2010 (1.26 per capita).²² This is particularly striking for two reasons. The first is that Michigan has a strong labor and a strong corporate presence, and the second is that Michigan had a ban on both corporate and labor IEs before the CU decision was passed. This is suggestive that strong disclosure laws can help to mitigate the effects of CU.

5.8 Discussion and Conclusion

A common response to the Citizens United decision was dismay. From the President to law scholars, the assumption was that the "floodgates" to corporate expenditures on behalf of favored candidates had been opened. The immediate response from federal legislators was to push for more transparency in the campaign finance realm, perhaps on the justification that if we cannot stop corporate money from flooding into elections, at least we can know who is running what attack ads and who is spending

²¹The text of the bans was as follows. For Michigan: "A corporation, joint stock company, domestic dependent sovereign, or labor organization shall not make a contribution or expenditure or provide volunteer personal services that are excluded from the definition of a contribution pursuant to section 4(3)(a)." (s.169.254, passed 1976, then interpreted by Michigan Secretary of State as unenforceable after CU.) For Iowa: "It is unlawful for an insurance company, savings and loan association, bank, credit union, or corporation to contribute any money, property, labor, or thing of value, directly or indirectly, to a committee, or to expressly advocate that the vote of an elector be used to nominate, elect, or defeat a candidate for public office." (Title 1, Subtitle 2, Chapter 68A Subchapter 5 s.503, passed 2003, repealed by SF 2354, 2010.)

²²Obviously, a per-capita dependent variable is a linear transformation of the raw amount of IEs, so the relationship, in terms of the differences, holds when we look at unweighted, or "raw" measures of independent expenditures, but the line for Michigan is above the line for Iowa in both periods.

the most. This push for transparency was not questioned by the public – if anything, the Op-Ed pages seemed supportive. The assumptions that Americans make about how transparent our government should be are naturally extended to even private citizens in a quasi-public sphere, as they campaign for office. As we summarize in our opening sections, this degree of transparency is rather recent, and its limits have not been fully explored by scholars, particularly in state-level analysis.

Our first test is on whether disclosure actually deters attack ads in state-level gubernatorial campaigns. We compare states in pre-CU elections and find that among states with an unrestricted independent expenditure environment, the state that strengthened its disclosure laws dramatically saw the greatest decrease in attack ads. The evidence is not as strong as we would like it to be, given our hypotheses. This is likely due to the data limitations we faced in conducting the analysis, which resulted in an inability to find statistical significance at traditional levels once we controlled for intra-state correlation over time using clustered standard errors. Admittedly, we do not know whether such intra-state correlation is a concern, but the most conservative approach is to assume it exists and correct for it. Nevertheless, because attack ads are "bad behavior" (even if rational), our findings provide weak evidence that transparency can deter behavior that is socially undesirable, that "sunlight" does indeed disinfect. This result contributes to a long line of literature on deterrence and the would-be violators' concerns about their wrongdoings being exposed.

Our second test is on a more instrumental purpose of campaign transparency laws, that of reducing the amount of money in politics. If a ban on independent expenditures is the preferred solution, and that solution is taken off the table by the court, can disclosure laws fill the gap? To test this, we find two states that have the same ban status pre-CU – both had their bans invalidated by the Court – but varied on the strength of their disclosure laws. We find a striking contrast in independent expenditures between the two states. After the states no longer have the "first best" option of banning independent expenditures from the largest group that might make them, they must rely on their disclosure regimes to help keep money in politics from growing rapidly. The state with the strongest transparency sees a minor change of only a penny per capita. The state with weak transparency sees a strikingly large increase in independent expenditures after its ban is invalidated. This is evidence that strong disclosure can step in to help restrain independent expenditures in a de-regulated campaign finance environment.

We are expanding this project in several directions. We are adding controls to the test of the effect on independent expenditures. We are awaiting more data on independent expenditures to add to our analysis of the effect of disclosure laws on independent expenditures. A separate project analyzes the effect of CU on money in politics. Finally, we are expanding our research into transparency laws by attempting to predict the political conditions that give rise to them. The line of research is fruitful, and with increased availability of data, we hope to bring all of these projects to fruition.

Plenty of open questions remain that would be more easily answered with more complete data. Researchers looking for interesting data projects to start should look no further than state campaign finance. To pick one piece of low-hanging fruit, if we had state-level advertising data for 2006 – when 34 states had gubernatorial elections, we could test our deterrence hypothesis on a much larger dataset and hopefully reach more solid conclusions.

Our findings inform the debate about special interest spending and how campaign finance laws influence the institution of electoral funding beyond the effects of one particular type of campaign finance law (bans on independent expenditures by corporations). Whether or not *Citizens United* has altered the American political landscape is an empirical question. To the extent that disclosure laws mitigate the effects of CU (for better or for worse), our analysis at the state level highlights the need for a broader conversation about the entire bundle of incentives facing corporations and other entities contemplating campaign finance.

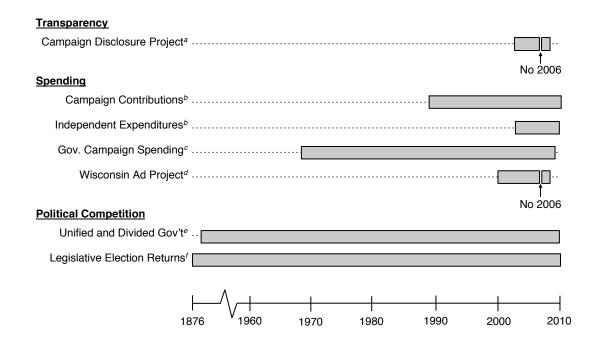


Figure 5.2: Sources on which we rely and the years for which data from each project is available. ^aThe Campaign Disclosure Project evaluated and graded each of the 50 states on their campaign finance disclosure requirements and online access. Data is available for the years 2003, 2004, 2005, 2007, and 2008 and can be downloaded at: http://campaigndisclosure.org/. bThe National Institute on Money in State Politics maintains a database of campaign contributions and independent expenditures to various state offices. Campaign contribution data are available for all 50 states for the years 1989-2010 and can be downloaded at http://www.transparencydata.com/bulk/. Independent expenditures data are available for 11 states for the years 2006-2010 and can be downloaded at http: //www.followthemoney.org/database/iemap.phtml. c Thad Beyle and Jennifer M. Jensen (Jensen and Beyle, 2003) compiled the Gubernatorial Campaign Finance Database, from which candidate-level annual expenditures are available for every year between 1968-2009. Download data at http://www.unc.edu/~beyle/guber.html. ^dThe Wisconsin Ad Project coded political advertisements in the nation's 75 largest media markets in 2000 and in the 100 largest media markets in 2002, 2004, and 2008. Data is available at http://wiscadproject.wisc.edu/download.php. ^eData on the composition of state government institutions has been compiled by several authors (Burnham, 1996; De Figueiredo Jr and Vanden Bergh, 2004; Snyder Jr. et al., 2006, 2010) and extend from 1885–2010. ^fLegislative election returns have also been compiled by various authors. We are grateful to James Snyder who generously shared his data on state election returns (1876-2010) with us (Snyder Jr. et al., 2006, 2010).

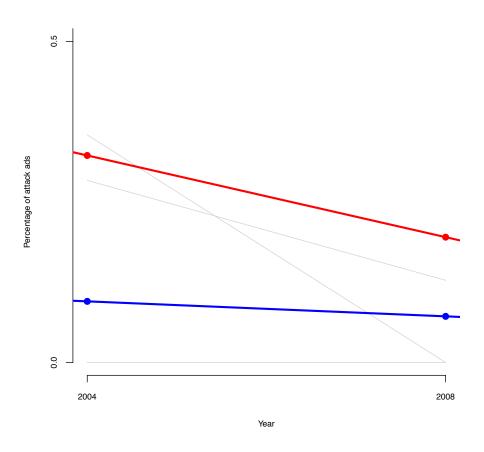


Figure 5.3: Probability of an attack ad, 2004 and 2008 gubernatorial elections. Red line is Missouri, which drastically strengthened disclosure between 2004 and 2008. Blue line is average of control states, each of which is shown in gray.

Two states affected by CU

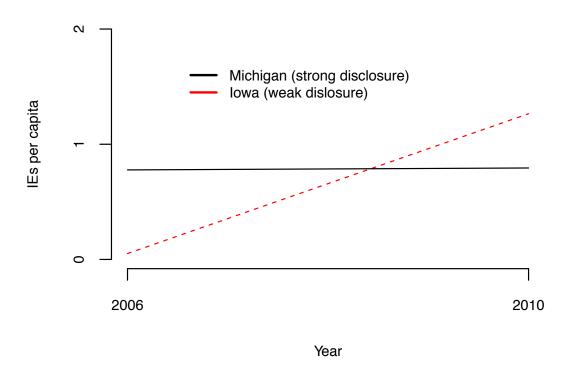


Figure 5.4: Independent expenditures (IEs), weighted by state population, before and after *Citizens United*. IE data source: *National Institute on Money in State Politics*. Both Michigan and Iowa had corporate bans on IEs that were invalidated by the Court's ruling in *Citizens United*. Michigan's disclosure score was strong in both time periods, while Iowa's was very weak. Disclosure data source: *Campaign Disclosure Project*.

Chapter 6

Conclusion

Transparency laws have been suggested as a way to reduce government corruption for a long time. They are generally offered in a package of anti-corruption tools, without much more than a list of possible transparency laws that a government could adopt. Part of the reason for this is that observing corruption, and observing the effects of transparency laws on corruption, is so difficult. Because corruption is a hidden phenomenon, measuring first-order effects is next to impossible, and we are left with observing only second-order effects, or changes in first-order effects without ever observing actual levels of corruption.

The present study has attempted to provide the first empirical study of the effects and political origins of a variety of transparency laws on the amount of corruption in government, as well as downstream political and economic effects. It also builds theory related to opening up government, proposing a partisan theory of government transparency and digging deeper into transparency as a concept, by distinguishing transparency-building institutions by the burden and risk placed on those using the laws to open up government. Finally, I propose policy changes at the state level that follow from both the theory and the empirical results presented here.

In this last chapter, I review the findings of the project and discuss important extensions to this work.

6.1 Overview of Findings

Over time, transparency laws have become more prevalent across states. Large, triggering events like Watergate seem to influence the timing of adoption, as we saw with state-level whistleblower laws. Additionally, the federal government can influence the timing of laws by passing legislation that ties federal financial outlays that benefit states to the states' adopting a certain type or strength of law, as we

observe generally with state-level False Claims Acts.

If politicians have full knowledge of how the laws work and do prefer strong fire alarms for government malfeasance, then we expect to see some impact from these laws. Unfortunately, for the two laws that most closely follow the fire-alarm model for detecting malfeasance within government, whistleblower laws and bounty laws, the data gathered to date cannot show that the laws are effective, either in terms of reducing corruption or in terms of economic impacts. The state-level bounty laws are simply too expensive (too high of a burden) to be worthwhile for individuals to use, even if the risk to the whistleblowers (or bounty hunters) is low. Illinois in general, and Chicago in particular, are commonly thought to be poorly governed and riddled with fraud. If a state-level anti-fraud bounty law like the Illinois False Claims Act does not work in a state like Illinois, then it probably will not work anywhere else.

Findings for the economic impacts of state-level whistleblower laws are still tentative. The data does not show a change in either the net interest cost or the ratings of local and county bonds in the wake of a new whistleblower law. However, data collection is still underway for both the whistleblower laws and any variables that rating agencies and investors consider when making decisions. Given the current state of the economic impact results, it seems that politicians either lack full knowledge of how the laws work or do not actually prefer strong fire alarms. This makes the inquiry into the political conditions under which we see transparency laws adopted in the first place even more interesting.

Transparency laws are more likely to be passed under divided government and under high competition with unified government. Under Republican governors, an increase in the size of the minority legislative party leads to a much higher "hazard" that a law will be adopted, though divided government combined with high political competition speeds adoption as well without regard to which party holds the governorship, a result that theory would not have predicted. Finally, high legislative political competition matters more under unified than divided government for adoption, as theory predicts. Political conditions do matter for whether and when a law is adopted.

For the strength of the law, we see the partisan story emerge. The strength of transparency laws is predicted by both party characteristics and the relative strength of the parties. With a Democratic legislative majority under divided government, the stronger the Republican minority, the weaker the transparency law that results, as theory would predict. This also complies with our partisan intuition that Republicans will want stronger transparency laws than Democrats – particularly fire alarm laws – since any exposed malfeasance in government helps Republicans in their fight against "big government".

When we move away from transparency laws that fit squarely in the "fire alarm" model toward a more active disclosure regime, in which those consuming the in-

formation are both low-risk and low-burden consumers, we see a different story for effectiveness. In the case of campaign finance disclosure laws, we see that stronger campaign finance laws have important effects on politics. When a state strengthens its disclosure laws, we see fewer attack ads result. And states with stronger disclosure laws are better able to withstand external deregulation of campaign finance, like that caused by *Citizens United*. Because of data limitations, these conclusions are necessarily limited.

Each chapter of this project blazes a new trail into corruption and transparency research. Each chapter uses a method of analysis that gets us closer to a causal inference for the effects of these laws than any previous study. Most studies of corruption are cross-state or cross-country analyses, and in Chapter 4, I dive much deeper into the effects of a single law on a single location, using a novel identification strategy that can be used more broadly in corruption research. Furthermore, my measure is less biased than existing measures of corruption in the United States.

This project advances our substantive understanding of corruption and transparency beyond previous studies. Chapter 3 is the first exploration of economic effects of transparency laws and the first attempt to predict their adoption and strength. Chapter 4 is the first analysis of bounty laws, particularly at the state level, and Chapter 5 is the first causal analysis of the effects of campaign finance disclosure laws as both directly impacting the tone of campaigns and instrumentally useful for reducing the amount of money in politics. There is still plenty to be done in this important realm of governance research – including important data collection and analysis efforts in these three projects, as explained in the chapters themselves. The following section describes future avenues for research.

6.2 Policy Implications of this Project

Recall Figure 2.1. The analysis in this project has focused mostly on two quadrants of the Figure – high burden, high risk and low-burden, low risk. Among high-burden laws, the projects analyzed whistleblower laws, which are always high risk, and bounty laws, which can be either high or low risk, depending on whether the person reporting is employed by the entity in which fraud is being committed. The finding that these laws are not effective must be interrogated further. Aside from using more data to analyze the economic effects of whistleblower laws, future research should focus on whether the problem is the burden or the risk, by grouping bounty laws according to the source of the report. Did an employee run the risk of reporting? Or was it someone outside of the fraud or malfeasance itself, who had little to lose?

It is important to make this distinction, because effective legislation must either reduce the burden, reduce the risk, or both. The more either the burden or the risk

is reduced, the more the law looks like a police patrol, rather than a fire alarm. One of the main burdens of a whistleblower law is the burden of proof required to receive protection for reporting malfeasance. Some states require near certainty, and even proof, of malfeasance, and they have financial penalties built in for false reports. The motivation behind the high level of proof is preventing "junk" complaints, but the high burden could be too high to prompt a person to agree to report. A law that allows reporting of suspicions, or that the whistleblower provide fewer details, could result in a more transparent and less corrupt government because it would make people more willing to report. Knowing that people are more willing to report and that the probability of detection by enforcement bodies has increased, would-be malfeasors will be deterred from at least some malfeasance. But allowing a lower level of proof means that the state will spend more resources doing investigations, which it is currently "outsourcing" to employees under the high-burden system. These are not new tradeoffs, of course, but they have not been empirically tested, and with the theoretical framework I present, we have a way to think about them and move forward to test them.

Risk can be reduced by allowing anonymous complaints. Again, the concern on the government's side is that a flood of "junk" complaints will result, and the law will be more of a police patrol than a fire alarm, costing the government valuable resources. But if it is risk that keeps these laws from being effective, then the way to reduce risk is for the government to internalize some of the cost that is currently on the whistleblower.

In the low-burden, low-risk category, we see that laws that neither create a resource burden on the user nor expose her to risk have a much clearer impact. Furthermore, the way these laws are designed, the burden is on an individual seeking office, rather than on a government entity. Of course, the individual seeking office has plenty of burden, perhaps so much that good potential candidates are crowded out of the field by the amount of paperwork required throughout campaigns. But in terms of whether these laws, as burdensome as they might be on the entity providing the information, actually work, the answer seems relatively clear. Despite the limited data available for the analysis in Chapter 5, we do observe clear effects.

6.3 Extensions of this Research

Moving beyond the cases of whistleblower, bounty, and campaign finance disclosure laws, these last pages identify directions for future research on transparency laws and non-legal, transparency-enhancing strategies for combatting corruption.

The most important missing piece of this project is an empirical analysis of the burden of complying with transparency requirements for the entities providing information. Theorists have written about this burden, but so far, no empirical welfare analysis compares the actual benefits of receiving information, exposing and deterring corruption to the costs to the government or political candidates of providing the data. Because "corruption prevented" is even harder to measure than corruption itself, it is no surprise that enterprising scholars have not made the effort.

Another avenue for future research is to close the circle of analysis begun here. In Figure 1.1, I present a research flow chart that starts and ends with politics. Particularly in the realm of campaign finance disclosure laws, where the effects of the laws are easier to see, their effects on government partisan balance are both interesting and crucial to understand. An unstated assumption of the current project is that political conditions that start the flow chart in Figure 1.1 are exogenous to the strength of existing transparency laws, but that is almost certainly not the case. The balance of power between the parties that amend and strengthen transparency laws could be aproduct of existing transparency laws. If the corruption of the "old guard" was exposed via transparency laws, then the "new guard" that replaces them are at least partly a product of the state's package of transparency laws.

Proactive disclosure is only lightly theorized and generally understudied, save in the election law context. One possibility for the future of transparency laws is to push them all into the realm of proactive disclosure, in which most types of government data are made available to anyone (Herz, 2009). The negative effects of a flood of information have been inadequately studied, though some election law scholars are beginning to question whether access to information is adequate in the case of campaign finance disclosure (Briffault, 2010). One measure of transparency laws is the usability of the information that they provide. Most laws do not address comprehensively the usability of the information provided in response to transparency laws. Future scholars in this line of research should consider a careful analysis of how usability can enhance or undermine the strength of transparency laws, particularly proactive disclosures. A current real-world example that is is also a low-burden, low-risk type of transparency that can result in a flood of information is the City of San Francisco's website, data.sfgov.org, which was established pursuant to a city ordinance, and which contains many kinds of unfiltered transparency data. Dataset views are amazingly low – for example, "Delegated Departmental Purchases by City Agency (Prop Q Purchases) Jan-Jun-2010", which has fascinating information about expenditures under \$10,000 made by the city over time has, as of this writing, been viewed 28 times, and I am personally responsible for at least four of those views. The data is highly usable, though some aspects of the website could be stronger. Nevertheless, it is an innovative answer to the scholarly demand for low-burden, lowrisk, and proactive information provision, and it manages to avoid the information flood that some election law scholars fear in the campaign finance realm.

As laws change, so does technology, and it often changes much faster than laws.

There have been interesting technological innovations that have moved far faster than the government's ability to write laws, both in the domestic and international sphere. Take, for example, bribespot.com, which allows anyone to geo-tag and report a bribe they have paid. Innovation in the private and nonprofit sectors can build pressure on governments to respond. These reports can also provide us with another measure of corruption across space and time, which will help us to triangulate all of our imperfect measures of bribery.

Taken as a whole, this study challenges the current scholarship on corruption to address more critically the variety of transparency laws, their possible impacts, and the motivations of the politicians who pass them. It provides a theoretical reason why some transparency laws fail and some succeed. Further, it suggests fruitful avenues for expansion of this project and important policy considerations for governments trying to fight corruption. While many questions remain, one thing seems clear: fire alarms are not necessarily the antidote to government corruption. In order to succeed in the battle against corruption, governments may have to commit serious resources to the fight.

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Appendix A

Data Appendix for Chapter 3

A.1 Preliminary Measure of Strength

The laws were gathered and searched primarily in the summer of 2011, with the help of an undergraduate research assistant. I used the framework employed by the Public Employees for Environmental Responsibility (PEER), expanding on it in places where I thought that we could capture more variation. The PEER index was developed primarily by Alan Richard (Dick) Kasdan, retired senior attorney with the Government Accountability Office. PEER has released three yearly indices, one every year since 2009.

The general categories and variables coded are below. Categories that I added are denoted with an asterisk (*). Points assigned to each category tested in the current data analysis are in parenthesis.

1. COVERED EMPLOYEES (SCOPE)

- Executive branch* (3)
- Legislative branch* (3)
- Judicial branch* (3)
- All Law Enforcement* (3)
- Contractor* (3)
- State employees* (3)
- Local employees* (3)
- County employees* (3)
- Federal employees in the state* (2)
- Employees in specific sectors only* (1)

2. LAW'S COVERAGE (VIOL)

- Violation of local (1), state (1), or federal (1) law, rules or regulations
- Gross mismanagement (3)
- Abuse of authority (including violations of agency policy) (3)
- Waste of public funds or resources (4)
- Gross waste (2)
- Danger to health (4) and/or public safety (4) and/or environment (4)
- Severe danger to health (2) and/or public safety (2) and/or environment (2)
- Communication of scientific opinion or alteration of technical findings (4)
- Breaches of professional ethical canons (2)
- Allow e'ee to refuse to carry out illegal (4) or improper (4) orders
- Reporting malfeasance that occurred before the law went into effect (4)
- Prohibition on "gag orders" to prevent employee disclosures (0)
- Whistleblower protection does not preclude collective bargaining or other rights (0)

3. SCOPE OF PROTECTION, WHERE TO DISCLOSE (DISCLOSE)

- Any person or organization, including public media
- Any state executive or legislative body or person employed by such entities
- Testimony in any official proceeding
- Any state or federal law enforcement or investigative body or entity or its employees
- Any federal or non-state governmental entity
- Co-workers or supervisors within the scope of duty
- \bullet Anyone as provided above without prior disclosure to another state official or ?
- Internal reporting required before external reporting?*

4. INVESTIGATION

- Does the law require an investigation by a state auditor or other investigative entity of the whistleblower (... complaint?)
- Allow reporting of malfeasance (etc) that was underway before the law was passed?*

5. STATUTE OF LIMITATIONS

• Have a statute of limitations of one year or longer for filing complaints?

• Length of statute of limitations*

6. INCENTIVES

- Have a qui tam or false claim actions for recovery of "bounty" in cases of fraud against (... government?)
- Qui tam percentage for reporting*
- Qui tam percentage for bringing the case individually*
- Any other financial incentives?*

7. REMEDIES AND RETALIATION

- Prohibition on retaliatory actions affecting state e'ee's terms and conditions of e'ment
- Opportunity for administrative challenge
- Opportunities for a court challenge
- Trial by jury
- Burden shifting upon prima facie showing
- Make whole remedies (court costs, attorney fees, back pay, restoration of benefits)
- Actual and/or compensatory damages
- Interim relief, injunction or stay of personnel actions
- Transfer preference for prevailing whistleblower or ban on blackballing
- Punitive damages or other fines and penalties
- Personnel actions against managers found to have retaliated

8. POSTING

Posting or employee notice of whistleblower rights required.

9. EVIDENCE

- What do reporters have to show? Suspect? Reasonably suspect? Know?*
- Any penalty for false reporting by whistleblowers?*

A.2 Political Competition over Time

I also have created a measure of electoral weakness similar to that developed by De Figuereido and Vanden Bergh 2004. I measure the fraction of years in which the governor's party has held the governor's seat over the preceding decade, and the fraction of years the majority party in the legislature has held a majority in the preceding decade. Both of these measures are subtracted from one, so that they are a measure of party weakness, rather than party strength.

Mean political weakness under unified and divided government over time

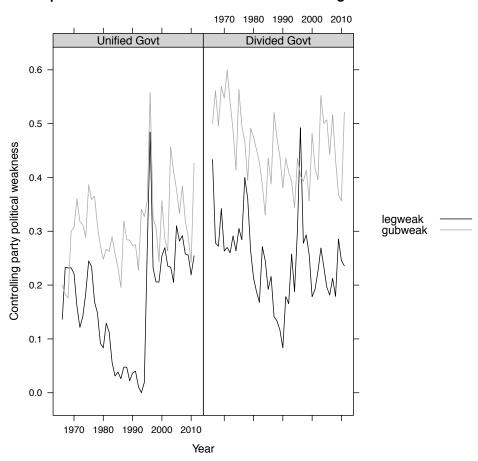


Figure A.1: Party weakness in majority party of legislature and governor's party over time. Darkest line is the weakness of the majority party in the legislature in a given year, and gray line is the weakness of the party holding the governor's seat in a given year.

Figure A.1 shows this measure over time. The legislative majority party is usually less weak than the governor's party, under both unified and divided government.

Stated another way, the governor's seat changes party more often than the majority house in state legislatures changes over the time period of interest.

A.3 Additional analysis

Figure A.2: Differences in bond ratings from five years before the first whistleblower law to five years after adoption of whistleblower law, where the law protection for local and county employees. 48,745 observations over 10 years.

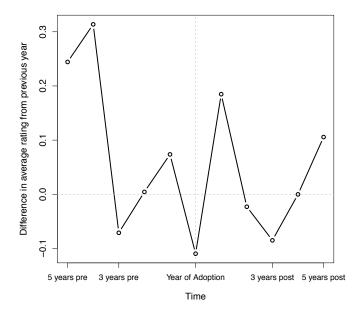


Figure A.3: Average bond ratings from five years before the first whistleblower law to five years after adoption of whistleblower law, where the law protection for local and county employees. 48,745 observations over 10 years.

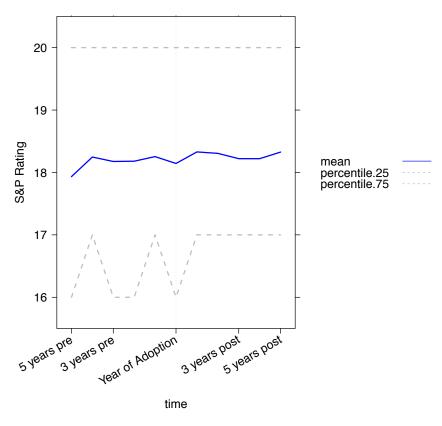


Figure A.4: Differences in NIC before and after adoption in states that passed whistle-blower laws covering local and county employees, from five years before their first law to five years after their first law. 44,640 observations over 10 years.

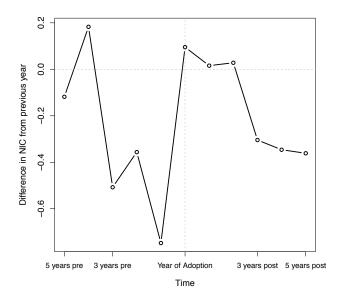
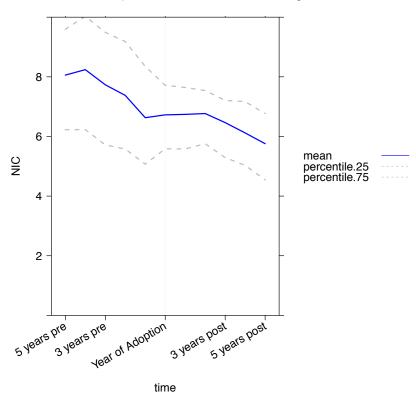


Figure A.5: Average NIC before and after adoption in states that passed whistleblower laws covering local and county employees, from five years before their first law to five years after their first law. 44,640 observations over 10 years.



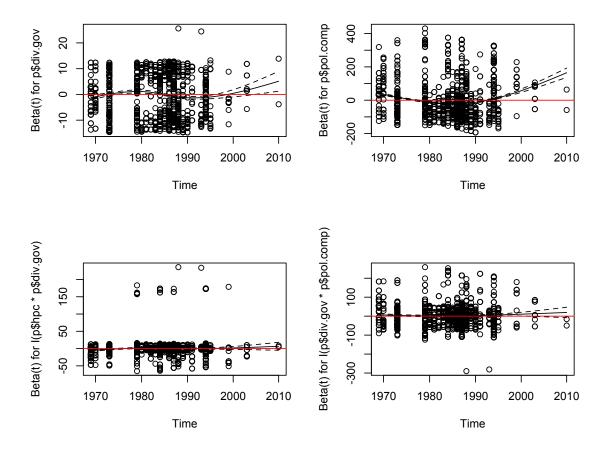


Figure A.6: Schoenfeld Residuals to assess Cox proportionality assumption. For the proportionality assumption to be appropriate, the residuals should be as close to zero as possible. A non-zero slope is an indication of a violation of the proportional hazard assumption.

Appendix B

Data Appendix for Chapter 4

This appendix describes the data collected and coded, as well as variables that we constructed. The data collection for this project was greatly assisted by the Undergraduate Research Apprentice Program at U.C. Berkeley. Fifteen research assistants worked on this data collection for an average of 6-8 hours per week for most of the 2010-2011 school year.

B.1 Data Collection

We ran the same search across all months: brib* or investig* or corrupt* or fraud or extort* or embezzl* OR malfeas* OR probe OR (whistle AND blow*). Around 15% of the articles this search returned were relevant (the "investig*" search term brought in a lot of irrelevant results). We evaluated relevance where we saw a report of an act of malfeasance by someone who was paid by the government, either directly, as an employee, or indirectly, as an employee of a government contractor while involved in government work. We have retained all relevant and irrelevant articles returned by these searches. Searching and coding assignments were assigned randomly to searchers and coders, with occasional, and slight, changes to balance the workload between researchers. No researcher coded the same month's worth of articles that she searched.

Once the relevant articles were identified, the coding began. We used Google Docs to create a series of spreadsheets that were numbered by a range of scandalIDs. Within each scandalID, we coded each person-act. We had to use a collaborative spreadsheet system like Google Docs, because some articles reported person-acts that appeared across different months and therefore required input and updates from different coders.

Within each scandal, we gathered the following information on person-acts:

- Unique person-act ID
- Unique scandal ID
- State (here, Illinois)
- City
- Story source (here, Chicago Tribune)
- Front page (dummy variable)
- Date of the Story
- Mention only (dummy variable indicating whether this person-act was only ever mentioned in a story about something else)
- Story type (report or editorial)
- How Reported (categorical variables describing the way the newspaper found out about the story)
- Number accused (the number of individuals accused in the entire scandal)
- Accused's name
- Accused's political party
- Government "level" (whether the person was an employee or contractor of local, county, state, or federal government?)
- Government "job" (categorical variable for a series of government jobs, including information on whether elected or appointed)
- Type of Malfeasance (categorial variable for the nature of the act in question)
- Administrative corruption (dummy variable)
- Political corruption (dummy variable)
- Other corruption (dummy variable)
- Minimum amount alleged involved, if a range given
- Maximum amount alleged involved, if a range given
- Date the malfeasance was alleged to have started
- Date of the alleged person act
- Date the malfeasance was alleged to have ended
- Who investigated (local, state, or federal)
- Who prosecuted (local, state, or federal)
- Did the accused plead guilty?
- Was there a trial (civil or criminal)
- Was the accused found guilty or liable?
- Did the defendant appeal?
- How many months of probation did the defendant receive?
- How many months of incarceration did the defendant receive?
- How much was the fine the defendant was sentenced to pay?
- Any other outcomes (ranging from public apology to losing job)

- Three sentence summary of the person-act
- List of articles (each has a unique ArticleID) that contained information on the person-act.

After each month of coding was completed, a different coder, who had neither searched nor coded the month, re-coded a randomly-assigned week of the month and reported back on any differences between how the "checker" would have coded the articles and how the coder chose to code them. While we did not calculate an actual intercoder reliability score, almost all of the reports back were that the checker found either no differences or small errors, like including the accused person's first name or coding a date with a four-digit year where the codebook said to use a two-digit year. I am confident that intercoder reliability is very high. I also went back through key variables for the entire data set over the course of three weeks, so any remaining errors are my own.

Some questions analyzed here required me to make assumptions in the data. Perhaps the most important is defining a "scandal" for the Number Accused variable. Deciding what information gives birth to one scandal, and where the person-acts for one scandal stop and another starts, is crucial. We treated a scandal as a batch of related person-acts arising from the same events.

I had to make minor assumptions about timing, too. Where the date the malfeasance started was only given as a year, with no month or day given, I constructed a variable assuming that the malfeasance started on the same month and day as the date of the first article reporting it, but the year as the one the article gave as the infraction starting date. This choice allowed me to increase my number of observations per month for the deterrence inquiries without clearly biasing my data in any way. For "ghost payroll" cases, in which people were on the public payroll without ever showing up for work, I assumed a monthly, rather than biweekly, paycheck, in order to make the coding easier.

Interviews

Semi-structured interviews were conducted by telephone in November 2010 and September 2011, and in person in November 2011. Interviewees were all currently or previously involved in state or county government. They are a current private sector false claims attorney who had a hand in drafting the 1995 FCA amendment, a current private sector attorney who prosecuted false claims for the attorney general's office in the past, a Cook County judge, and an employee of the Cook County Clerk's Office. Because of the sensitive nature of the interviews, I choose to leave their names out of this draft.

B.2 Overlap of Key Covariates

One of the assumptions of the analysis used here is that there be overlap of key covariates. This is often tested for overlap on the propensity to receive treatment, but since treatment here is an amendment to an existing law and the type of corruption involved is the only key covariate for that, I decided to focus my overlap check on the covariates that we might think affect the mechanisms of deterrence (internal reporting and prosecution). The number of people accused and the amount alleged to have been taken (or wasted) in the malfeasance seemed most likely to prompt both reporting internally and prosecution. Here, I show overlap on those variables, in the pre- and post- period.

Interestingly, overlap is better in the pre- period than it is in the post-period. I have plotted these as over time, and the changes are not caused by the law but instead occur later.

B.3 Interrupted Time Series Analysis

In order to give estimates of the change in slope and intercept for the false claims over time and the precision of those estimates, I subset the data to only the false claims cases and estimate the equation

$$Y_{it} = \alpha + \beta m + \lambda d_t + \delta(d_t * m) + \gamma year + \theta scandalID + \epsilon_{it}$$

where Y_{it} is the outcome for person-act i in time t (pre = 0, post = 1);

 $\alpha = E[Y_{it}|t=0]$, which is the expected value of the dependent variable in the first month of the pre-amendment period;

 β is the time trend among all malfeasance cases pre and post;

 $\lambda = E[Y_{it}|t=1] - E[Y_{it}|t=0]$, or the change in level (intercept shift) before and after;

 δ = the change in slope from pre- to post period

 $\gamma = E[Y_{it}|year]$ is a year fixed effect, with each year entered separately into the equation.

 $\theta = E[Y_{it}|scandalID]$ is a scandal (group) level variable, whose most important use is for clustering the standard errors, as described below.

The two coefficients I report are λ , which tells the change in level pre- and post, and δ , which tells whether the rate of changed increased, decreased, or stayed the same. For reasons explained in Figures 4.1 through 4.6, a difference-in-differences design would mask much of the interesting data variation here. In particular, the

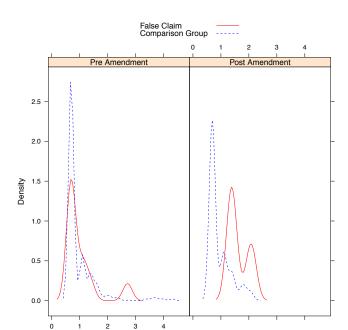
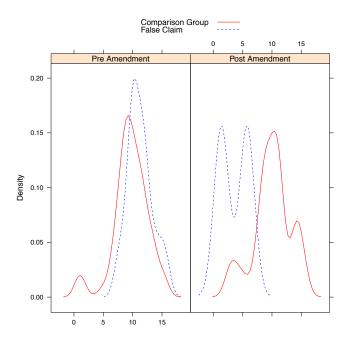


Figure B.1: Number Accused per Scandal, logged





massive decrease in false claims before the law was even introduced would have been masked. That is why I run the analysis on the change in the false claims line only.

The year fixed effect is intended to account for any unobserved confounders that are fixed within years, particularly political changes. For example, if a county elected a new prosecutor who had different ideas about prosecuting fraud than his predecessor, that political change could affect our outcomes on prosecution in a way that is separate from the effects of the amendment itself. To control for such unobserved changes that could bias the estimation of γ , the coefficient of interest, I de-mean the data of yearly changes by including a year fixed effect.

Similarly, within each scandal, I have 1 to 106 person-acts alleged. There is some variance within scandal (on whether an act was prosecuted, how the information about the act reached the newspaper, the amount alleged to have been stolen, and the nature of the act), but several scandals have repeats of the exact same person acts, save the date they occurred. A regular standard error would underestimate the variance in the data. That underestimation will not bias my results, but it falsely increases the efficiency of the estimation by decreasing my estimation of standard errors. Therefore, in order to estimate the correct standard errors, I cluster the standard errors at the scandal level.

B.4 Taking the long view

In this part of the appendix, I show the "long view" of local corruption over time in Illinois. It is clear that the early part of the two year window is a particularly active time for false claims in local government, but that the conclusions in the main text hold even when we take a longer view.

Figure B.3: Person-acts per month among false claims and the comparison group.

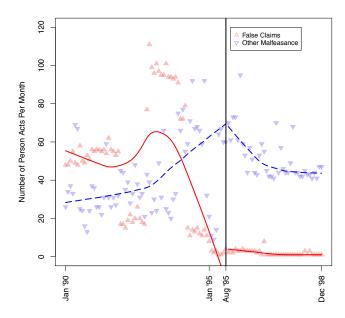


Figure B.4: Person-acts per month among scandals involving malfeasance that cost the government more than one million dollars

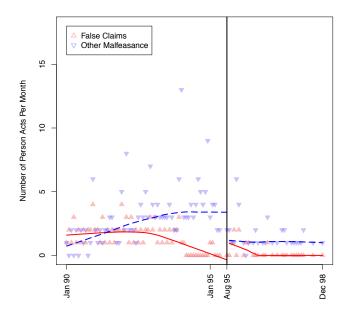


Figure B.5: Probability that any given person act of malfeasance was reported via an internal source.

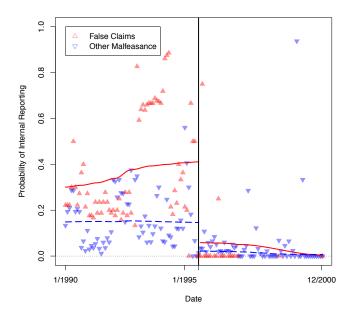


Figure B.6: Probability that any given person act of malfeasance was reported via an internal source, among scandals with more than \$1 million in malfeasance alleged.

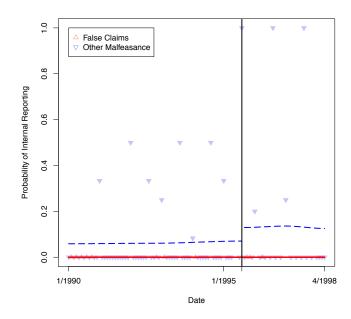


Figure B.7: Probability that *ongoing* or *completed* malfeasance was prosecuted. Malfeasance that took place after the enactment date is excluded from this subset.

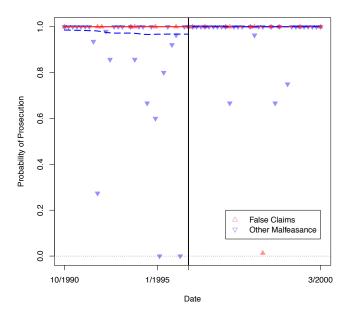


Figure B.8: Probability that a given new false claim is prosecuted, relative to the comparison group.

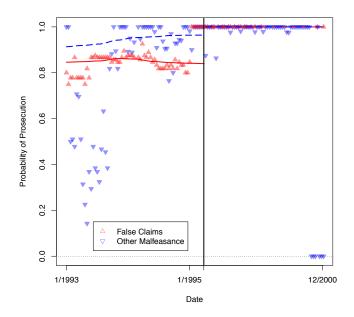


Figure B.9: Person acts of completed or ongoing malfeasance by the month of the story.

