Citizens United, Independent Expenditures, and Agency Costs: Reexamining the Political Economy of State Antitakeover Statutes

Timothy Werner[i]

John J. Coleman[ii]

Draft: July 11, 2013*

Abstract

We test the agency theory of corporate political activity by examining the association between the legality of independent expenditures and antitakeover lawmaking in the U.S. states. Exploiting changes in state campaign finance law regarding the use of corporate independent expenditures in the pre-*Citizens United* era, we estimate that a state is more likely to pass antitakeover statutes that entrench management when firms are allowed to make independent expenditures to influence electoral campaigns. We also find that this relationship is conditional on the competitiveness of a state's electoral environment, suggesting that the threat of independent expenditures may move vulnerable legislators' votes on less salient issues, such as corporate governance. These findings are robust to competing public interest and political economy explanations for antitakeover law adoption, and they reveal that allowing independent expenditures may create additional agency costs for owners through public policy. Finally, these results strongly challenge the claim that state-level antitakeover laws are exogenous to firms' activities.

Keywords: *Citizens United*, Campaign Finance, Agency Theory, Antitakeover Statutes

JEL Codes: D72, G38, K20

[i] Assistant Professor of Business, Government & Society; McCombs School of Business; University of Texas at Austin. Email: timothy.werner@mccombs.utexas.edu. Office: 512-232-6844. Web: http://timothywerner.com

[ii] Professor of Political Science; University of Wisconsin–Madison. Email: coleman@polisci.wisc.edu. Office: 608-265-3680. Web: http://www.polisci.wisc.edu/coleman

1. Introduction

The Supreme Court's 2010 ruling in *Citizens United v. Federal Election Commission* (130 U.S. 876) set off a firestorm of criticism, largely centered on the ruling's provisions that allowed corporations to make unlimited independent expenditures to influence electoral outcomes. Unlike money contributed directly to candidates or political parties, the Court's majority opinion reasoned that such independent expenditures do not lead to the appearance or presence of corruption, meaning the state had no constitutionally compelling justification for limiting this spending. In addition to striking down the federal independent expenditure ban, *Citizens United* also effectively negated similar statutes in 23 of the 50 states by overturning its 1990 decision in *Austin v. Michigan Chamber of Commerce* (494 U.S. 652).[1]

In popular discourse and among its critics, *Citizens United* is linked to the notion that American politics is experiencing a "corporate takeover" that will result in public policy favoring the desires of business and its allies. Beyond examining the potential electoral impacts of independent expenditure bans (e.g., La Raja and Shaffner 2012; Klumpp, Mialon, and Williams 2012; Spencer and Wood 2012), little empirical work has explored what the policy effects of such bans are, however. This study offers an assessment of the potential effect of corporate independent expenditure bans on a public policy outcome of great interest to managers and owners: state-level antitakeover statutes. We find that when firms are allowed to make unlimited independent expenditures in a state, antitakeover statutes favor management. To identify this effect we exploit variation within state laws on corporate independent expenditures during the height of the antitakeover era (1986–2001) by analyzing a dataset that covers the 38 states that had not adopted such a ban prior to 1986. We find further that this relationship is moderated by

---

[1] The Court made clear that the *Citizens United* decision applied to state laws in June 2012 through its *per curiam* opinion in *American Tradition Partnership, Inc. v. Bullock* (587 U.S. ____).

electoral competition.

These results are supportive of an agency cost interpretation of corporate political activity (CPA). Broadly, agency theory argues that managers use firms' resources in a self-interested manner and extract rents from shareholders (Jensen and Meckling 1976). Within the realm of CPA, scholars argue that managers introduce agency costs not only by using more firm funds than are optimal in the political process but by using these funds to pursue public policies that benefit management. Antitakeover laws are perhaps the most prominent manifestation of such public policies. As Mallette and Spagnola (1994) document, following the invalidation of first-generation antitakeover statutes by the Supreme Court in 1982 in *Edgar v. MITE Corp.* (457 U.S. 624), several states responded by passing second-generation statutes. These statutes were upheld by the Court's 1987 decision in *CTS Corp. v. Dynamics Corporation of America* (481 U.S. 69). The wave of adoptions that we analyze occurred across the states in the late-1980s and early-1990s. If these statutes were the product of corporate pressure and also increased agency costs for shareholders, their adoption provides evidence for an agency interpretation of CPA.

Although we focus on a specific empirical manifestation of corporate political influence, our results speak to several broader debates and literatures. First, studies of the potential electoral consequences of *Citizens United* have reached mixed conclusions, but we find a substantial effect for corporate independent expenditure bans in the specific policy realm of corporate governance, which may help tailor responses at the firm level. Second, and as we discuss further in the next section, unlike most of the existing studies offering agency theory as an explanation for CPA, we provide a clear test of the framework's expectations by examining both a source of campaign spending that is unambiguously subject to agency costs as our independent variable of interest and an outcome that also is a concrete manifestation of agency

3

problems as our dependent variable. Third, beyond these contributions to the campaign finance literature, we also add to the field of corporate governance in two ways: a) we revive and extend the literature on the political economy of antitakeover statutes; and b) we document that state-level antitakeover statutes are not exogenous to firms' activities but rather are strongly and positively associated with various forms of CPA, including independent expenditures and lobbying efforts.

The rest of the paper proceeds as follows. Section 2 provides additional background on agency theory as it relates to CPA and antitakeover statutes and articulates our theoretical expectations. Section 3 introduces our data, identification strategy, modeling approach, and hypothesis. Section 4 presents our results, and Section 5 provides three robustness checks of these results. Section 6 discusses the implications of our findings and concludes.

2. Agency Theory, Campaign Finance, and Antitakeover Statutes

We begin this section by briefly reviewing the literatures on agency theory and CPA, as well as agency theory and antitakeover laws. We then develop our theoretical argument regarding how corporate independent expenditures affect antitakeover lawmaking.

2.1 Agency Theory and Corporate Political Activity

Three theories have been offered to explain CPA. The first argues that firm engagement in politics is a strategically motivated investment that benefits firms and industries (e.g., Snyder 1990; Grier, Munger, and Roberts 1994). This view suggests that firms' patterns of giving reflect rational behavior to the point that the marginal cost of giving equals its marginal benefit. The second theory views campaign contributions as more akin to a classic consumption good for

executives than as an investment by the firm since individuals' monies fund corporate political action committee (PAC) donations (Ansolabehere, de Figueiredo, and Snyder 2003). Firms' giving is thus neither particularly beneficial nor terribly costly according to these authors, as their contributions are unlikely to have an impact on public policy or firm value since they constitute such a small share of the contribution pool (Ansolabehere, Snowberg, and Snyder 2005). The final theory of CPA claims that firms gain little from their political engagement and argues that campaign contributions and other expenditures related to political activity represent agency costs generated by managers engaging in politics at their shareholders' expense (e.g., Chappell 1982; Keim and Zardkoohi 1988; Aggarwal et al. 2012; Coates 2012; Hadani and Schuler 2012).

With regard to campaign finance regulation, agency costs have long been a concern. As Winkler (2004) and Mutch (1988) argue, many early regulations of CPA—including the ban on direct contributions from firms to candidates instituted by the Tillman Act of 1907—were motivated by the agency costs exposed through investigations into the role of money in politics in the Progressive Era. These historical accounts are consistent with studies of modern CPA and the freedom managers aim to secure by engaging in it. For example, Vogel (1978) notes that "The criterion by which business evaluates government policy has remained quite firm: does the proposed intervention strengthen or weaken the autonomy of management?" (51).

Despite the qualitative evidence in favor of an agency interpretation of CPA, most of the quantitative evaluations of the theory have failed to test it properly. Specifically, they have used invalid measures of agency costs as their key independent or dependent variable (or both). With regard to the former, the early studies in this vein developed with reference to corporate PACs since data on these entities were easily available, but PACs are legally segregated from their

corporate sponsors and raise funds to contribute to candidates from a restricted class of individuals connected to the firm but not from the corporate treasury itself, meaning that PAC contributions cannot be considered agency costs. Only a few studies (Aggarwal et al. 2012; Coates 2012) have used measures of CPA (e.g., pre-2002 soft money donations, lobbying expenditures) that actually come from the corporate treasury. These latter studies, however, largely use financial outcomes as their dependent variable, which implicitly assumes that if CPA does not increase shareholder value, it is wasteful and thus an agency cost. This use of financial outcomes can be problematic though, as much of CPA, including lobbying, is defensive in nature and designed to preserve existing rents rather than to seek new ones (see, e.g., Baumgartner et al. 2009). Coates' (2012) examination of managerial perquisites, such as jet use, to capture agency costs is an exception in this regard.

Despite these weaknesses in the agency theory CPA literature, we argue that this perspective is particularly important for understanding corporate behavior in environments like the one created by *Citizens United*. In contrast to PAC donations, corporate independent expenditures come directly from corporate treasuries and may easily dwarf the amounts corporate PACs can give to individual candidates and the amount they contribute overall, which increases the possibility that managers will raise their political involvement to levels that are beyond optimal for shareholders. Such a result would not square with the investment and consumption views of CPA. Further, the use of or threat to use independent expenditures to secure public policies that protect management decision-making from shareholders' control is an outcome variable that is directly related to agency costs. Before articulating the logic of this relationship further, we review how antitakeover statutes create agency costs.

2.2 Agency Theory and Antitakeover Statutes

As Barzuza (2009) notes, antitakeover law is one of the most studied and debated topics in corporate law. The existing literature focuses on three questions.[2] The first strand of literature asks whether there is interstate competition in corporate law (including antitakeover statutes) that benefits shareholders or whether federal intervention to set minimum standards is needed. On one side of this debate are scholars who argue that interstate competition leads to a race to the bottom, with states enacting antitakeover statutes that favor management at the expense of owners in order to raise revenue from franchise taxes (see, e.g., Cary 1974; Bebchuk 1992; Bebchuk and Ferrell 1999; Bebchuk, Cohen, and Ferrell 2002; Subramanian 2004). In contrast, a second set of scholars argue that state competition appears to aid shareholders because capital markets pressure states to adopt quality law or see their domiciled corporations flee (see, e.g., Winter 1977; Romano 1985; Easterbrook and Fischel 1991; Romano 2006).

To the degree that the first side of this argument is correct, antitakeover statutes are likely to emerge and thus lessen the monitoring power of the takeover market (Manne 1965) by erecting artificial barriers that are not designed to extract additional value from bidders but rather to entrench managers. In turn, these statutes will decrease the incentives for managers to run their firms as efficiently as possible and thus create agency costs. There is nonetheless a debate as to whether the empirical evidence supports this view. Coates (2000) grants that the application of agency theory to antitakeover provisions is straightforward but argues that the empirical literature on whether or not such laws introduce agency costs is not particularly persuasive, in part due to methodological issues. In contrast, Subramanian (2002) states that there is robust evidence that antitakeover laws increase managerial agency costs, and Bertrand

---

[2] This is a necessarily brief summation of this literature; for a recent, extensive literature review on this topic, see, Davidoff (2012). Davidoff's review also covers the research on the adoption and value effects of firm-specific, self-imposed antitakeover provisions (see, e.g., Gompers, Ishii, and Metrick 2003; Bebchuk, Cohen, and Ferrell 2009).

and Mullainathan (1999) contend that state antitakeover laws facilitate managers tunneling firm resources to themselves in the form of greater compensation.

The second strand of literature builds off the first and asks what the effects of such statutes are on firms' decisions of where to incorporate. Both Bebchuk and Cohen (2003) and Subramanian (2002) argue that states that enact second-generation antitakeover statutes are more likely to see existing firms headquartered in the state also incorporate there. Bebchuk and Cohen find this effect for all types of antitakeover laws and also find evidence that states also attract out-of-state firms as they strengthen their antitakeover laws. Subramanian's findings do not extend to the question of attracting out-of-state firms, and he also finds that the adoption of extreme or third-generation statutes can actually decrease the number of incorporations. Cohen's (2012) study produces a more subtle finding that suggests that firms react positively to antitakeover laws but that managers' preferences for such laws in the incorporation decision decrease as the number of shares held by institutional investors and the amount of venture capital backing the firm increase. Using data on firms' decisions to incorporate at the time of their initial public offerings (IPOs), Ferris, Lawless, and Noronha (2006) find that a state's rank by number of incorporations is positively related to the speed with which it adopts management-friendly policies, which include four antitakeover statutes. In contrast to these findings, Kahan (2006) and Daines (2002) also employ IPO data and find that antitakeover laws do not affect state-level retention rates or what state individual firms decide to incorporate in initially, respectively.

The final major strand of antitakeover law research examines how the adoption of antitakeover statues by a state affects the value of firms incorporated there. For example, Karpoff and Malatesta (1989) find that both shareholders and bondholders see value reductions

when such statutes are enacted, and Hackl and Testani (1988) document that value enhancing firm-level events, such as takeovers and tender offers, also decline in the wake of such laws. In summarizing this literature, Subramanian (2002) states that antitakeover laws both increase managerial agency costs and have a significant negative impact on firm value.[3]

2.2 Independent Expenditures, Agency Costs, & Agency Outcomes

Despite this vast body of research, few studies examine the determinants of antitakeover laws. Although Barzuza (2009) makes an important contribution by examining the development of antitakeover case law across the states, her study focuses only on case law and not the enactment of the statutes that these state courts are interpreting. We are aware of only one prior published quantitative study on the determinants of legislative adoption of takeover statutes (Romano 1987), and that article does not consider the role that independent expenditures may have played in the passage of such laws.[4] We reexamine the political economy of antitakeover statutes for two reasons. First, antitakeover statutes are a clear example of a policy outcome that writes agency problems into law, allowing us to use them as an independent variable to test the agency theory of CPA. Second, the bulk of antitakeover statute lawmaking occurred after Romano's study, suggesting that the dynamics she uncovered using only data from the mid-1980s might not fully capture the forces at play in this policy domain over time. In this subsection, we summarize Romano's findings and offer a theoretical rationale for the existence

---

[3] Similarly, Daines (2001) and Subramanian (2004) find that, to differing degrees and at different points in time, incorporating in Delaware, in part due to its relatively weak antitakeover law, enhanced firms' values.
[4] Several additional studies provide qualitative examples of the adoption processes behind individual statutes (see, e.g., Butler 1988; Roe 1993), and Carney (1998) provides an excellent discussion on the diffusion patterns of corporate law generally and antitakeover provisions, specifically, across the states – with regard to the latter, he also identifies the "corporate sponsor" of several individual antitakeover statutes in various states. Additionally, Sitkoff (2002) engages in a theoretical discussion of the relationship between the regulation of political activity at the state level and the market for incorporation.

of a negative relationship between a ban on corporate independent expenditures and antitakeover law passage.

Romano's study of the political economy of state antitakeover statutes uses a cross-section model of the 50 states, with a dependent variable that captures the state's rank order in adopting a second-generation antitakeover statute. Her focus is on determining which is more likely to explain the order in which states adopt antitakeover statutes: a broad coalition of political interests or splits within the business community created by the presence of domestic acquirers. She finds evidence that is more consistent with the latter explanation but cannot rule out the former. That is, the key factor that affects the order in which the states adopt an antitakeover statute is the presence of acquiring firms in the states, and there is no broad political push, whether by business, unions, or other interests, to secure such statutes. As a result of these findings, along with qualitative evidence on the adoption of such laws in Connecticut and other states, her results have been interpreted to suggest that antitakeover laws can be viewed as exogenous to the average firm's political activity (see, e.g., Bertrand and Mullainathan 2003; Gompers, Ishii, and Metrick 2003; Armstrong, Balakrishnan, and Cohen 2012).

In addition to the issues that arise from Romano's study occurring at the beginning of the antitakeover wave, there are a number of other factors that may limit its current applicability. First, the model provides a simplified view of political activity, using only one categorical measure of the level of organized politics in the state. Such an approach is is inadequate for capturing the diverse channels that firms, unions, and individuals have to influence state legislators. Second, the study's dependent variable does not capture the degree of antitakeover lawmaking since only a simple binary underlies the ordinal measure. Finally, the study's data do

not include a time dimension, so it cannot identify how changes in the political environment may have altered the incentives of legislators to enact antitakeover statutes.

Our study addresses many of these issues by analyzing a panel data set of 38 states over 15 years, including a more richly informed set of covariates related to political activity, and examining a broader set of antitakeover laws that states can adopt. Nevertheless, our focus remains on whether or not allowing the use of independent expenditures affects antitakeover lawmaking in a state. To model this potential relationship, instead of conceptualizing the political economy of antitakeover laws as either the product of active lobbying by a coalition or of an attempt to "put out fires" created by divisions between acquirers and targets within the business community, we view each state's set of antitakeover laws as a product of supply and demand forces.

As Romano (1987, 1988) notes, there are a variety of factors that may affect a state's willingness to supply antitakeover legislation. Principally, these include worsening economic conditions and the presence of an amateur state legislature, both of which should increase the probability of adoption. To these two, we would add interstate competition as a factor likely to increase adoption, as well as the size of the state's pension fund and its level of policy liberalism as factors likely to decrease adoption. To the degree that the number of active takeover attempts of domestic firms may affect any of the above determinates, we might also consider it a supply-side factor, but it certainly has demand-side elements to it as well, as targets may mobilize politically to protect themselves via public policy.

The demand side dynamic of antitakeover laws is where both Romano (1987) and we focus. In particular, we are interested in how the availability of different political instruments affects the adoption process: that is, how do the different legal channels that allow unions, firms,

11

and individuals to participate in politics affect the probability of statute adoption? Consistent with the broad-based coalition argument, we would expect that for unions and firms, the more opportunities they have to participate, the more likely state legislators will be to pass antitakeover laws. In the remainder of this section, we further explain this logic, and we formally state our hypothesis in the next section.

The existing literature on corporate influence in politics suggests that business is likely to have its greatest impact in policy subsystems that are of low salience to the public (Hall and Wayman 1990; Smith 2000). As Romano (1988) found in a study of public opinion on corporate takeovers, even when this issue was at its peak level of activity and heavily covered in the media, it remained of low salience. Under such circumstances, we argue that management can use or threaten to use independent expenditures to persuade legislators to vote in favor of antitakeover statutes that entrench them. Because independent expenditures are not subject to the limits that corporations face in the few states that allow corporate contributions and because unions may also support such laws but have fewer total funds to advocate for them, we expect that allowing corporate independent expenditures has a larger impact than other campaign finance regulations in producing management-friendly public policy and that, conversely, banning such expenditures would insulate legislators from managerial pressure to a greater degree.

Anecdotal evidence suggests that these dynamics are plausible within the realm of antitakeover lawmaking. Romano's quantitative analysis produced no evidence in favor of corporate political influence in antitakeover lawmaking; however, in her case study of Aetna's lobbying for Connecticut's fair price statute, several of her interviewees suggested that the rising costs of campaigns for office and the availability of corporate money made legislators more open to making pro-management votes. Although there is no specific discussion of independent

12

expenditures in her study, we note that Connecticut did not adopt an independent expenditure

ban until 2000, meaning that it could have been a factor in legislators' decisions in the mid-

1980s. Similarly, in the battle over Delaware's business combination statute in 1988, forces on

both sides of the fight employed a variety of political tools. Activist investor T. Boone Pickens

used independent expenditures to air television advertisements that encouraged citizens to lobby

their legislators in opposition to the statute, and in response, the CEOs of two prominent

Delaware firms (DuPont and Hercules) lobbied legislators, reportedly threatening them with out-

of-state reincorporation and political reprisal (Hays 1988; Yang and Weber 1988). That

Delaware's lawmaking experience may have exhibited this level of political activity is

particularly important to highlight for two reasons. First, Delaware has just under a 50 percent

market share in incorporations (Fisch 2000), meaning that its laws have broad economic

implications. Second, the involvement of an array of firms and investor interest groups makes

clear that Delaware's antitakeover statute was not the product of a single firm's demands. To see

whether this experience was typical and whether or not corporate independent expenditure laws

make a difference for antitakeover lawmaking, we turn to our quantitative analysis.

3. Data and Methodology

We investigate the effect of independent expenditure bans on the adoption of antitakeover

statutes between 1987 and 2001. Although our sample period ends in 2001, this time series

captures the most recent active period in the U.S. market for corporate law (Bebchuk and Ferrell

1999).[5] In this section, we introduce our dependent variable, our identification and modeling

strategies, and our hypothesis and control variables.

---

[5] Our data series begins in 1986, but since we difference and lag our variables, 1987 is the first year we model.

3.1 Dependent Variable: Antitakeover Statutes and their Adoption

We use the Bebchuk and Cohen (2003) antitakeover statute index as our dependent variable. The dataset includes six variables, but as an index it only sums to five since two of the variables tap the same underlying legal concept (a business combination limitation) but differentiate on how strictly the state applies the concept (in number of years). The index has a Cronbach's alpha 0.749, and a principal components analysis shows that only the first component has an eigenvalue (2.51) greater than 1. Both of these statistics indicate that the index is strongly internally consistent. The index contains the following items:

- control share acquisition statute,

- fair price statute,

- no freeze-outs in the business combinations statute for up to 3 years,

- no freeze-outs in the business combinations statute for more than 3 years,

- poison pill endorsement via statute,

- constitutencies statute.

Figure 1 plots the aggregate trends in adoptions for each of these types of statutes and reveals a rapid increase in adoptions early on and a leveling off after 1992.[6] Although many of the studies cited above find that these statutes have an effect on the incorporation market (particularly for firms that are already publicly traded), the significance of these statutes has not gone unchallenged in the corporate governance literature. Principally, Coates (2000) argues that because of the way some statutes interact and because of the fact that poison pills render most of the other statutes' effects irrelevant, analyzing them as a package or concentrating on statutes other than those authorizing poison pills may be unnecessary. However, several of these statutes

---

[6] As Bebchuk and Cohen (2003) note, the vast majority of these statutes were adopted prior to 1992. All of the results we present here are robust statistically and substantively to limiting our analysis to the 1987-1992 time period.

are nonetheless important because they entrench management in ways that it cannot achieve

through charter provisions alone (Matheson and Olson 1991). Further, as Bebchuk and Cohen

(2003) note, these statutes are important both for what they actually measure and what they

signal, especially with regard to managerial autonomy. The quality of this signal may degrade

over time (Daines 2002), but since we are studying the contemporaneous decisions of firms to

lobby or campaign in favor of such statutes, we are less concerned with this potential effect. To

address Coates' concern regarding poison pills, we examine patterns specific to the adoption of

laws authorizing this provision alone as a robustness check in Section 5.

< Insert Figure 1 Here >

3.2 Timing of Independent Expenditure Bans

We identify the effect of corporate independent expenditure bans based on changes to

state laws. Table 1 reports which states had such bans, and the year they were first in place.

During our sample period, seven states opted to ban unlimited corporate independent

expenditures. To properly identify the effect of a ban, we exclude the 12 left-censored states that

had such bans in place in or before 1986, leaving us 38 states to observe in a time-series cross-

section approach.[7] We coded a binary variable indicating whether or not in each state-year a

corporate independent expenditure ban was in place using data from the National Conference of

State Legislatures (NCSL).

---

[7] Excluding the left-censored states allows us to identify most cleanly the effect of a ban's imposition without
introducing sample selection bias, as the censoring is a function of an independent variable, and the error term of a
regression predicting whether a state had a ban in place prior to the start of our time series likely would not be
correlated with the error terms of our regressions in Tables 3 and 4, as the second generation laws we model in our
dependent variable were only definitively permitted by the Supreme Court in *CTS Corp. v. Dynamics Corp. of
America*, which was decided in 1987, the same year our sample period begins. This is result is largely due to our
fixed effects approach in which each state serves as its own control. Nevertheless, we note here that including these
12 states would not change the statistical or substantive conclusions we reach but would weaken our identifying
assumptions.

< Insert Table 1 Here >

Actual levels of corporate independent expenditures or corporate donations to independent expenditure committees would be a more richly informed treatment variable, but we argue that using this binary variable is defensible for two reasons. First, it is methodologically realistic. Attempting to gather, and to code consistently, data on independent expenditures across 38 states over 15 years is an essentially impossible task that would raise serious questions regarding data quality and validity. Ideally, these data would be available to include in our analyses, but they are not. Second, focusing on the regulation of the campaign finance environment broadly captures the argument that business' power stems not just from its actual political spending but also its potential spending and the threat of electoral intervention (Lindblom 1977). As we will show later, the threat of firms spending against vulnerable legislators appears to be a significant mechanism in shaping antitakeover legislation.

3.3 Error Correction Model

We ran an error correction model (ECM) using ordinary least squares regression with panel corrected standard errors since we are available to observe the entire population (all 50 states). Error correction modeling is a time-series approach that can easily be applied to a panel framework (Beck 2001). Chief among its benefits are its lack of imposed restrictions and its use of the first-differenced value of the dependent variable, which assures us that our panels are of stationary processes. To assess statistical significance in an ECM, we examine both the lagged and differenced values for each independent variable, and if either is statistically significant, we can state that there is a significant association between that variable and the dependent variable. In terms of their substantive interpretation, the differenced measure captures the short-run

16

adjustment caused by a change in the variable, and the lagged term, in combination with the lagged value for the dependent variable, captures the long-run dynamics of the relationship (Yasar, Nelson, and Rejesus 2006). We chose to use an ECM over a simple differences-in-differences approach to account for the reality that even sharp reforms to electoral systems typically have effects that unfold over several years, as candidates and interest groups may preemptively adjust their strategies in response to forthcoming changes in electoral and campaign finance laws (see, e.g., Meirowitz 2008).

Following Wilson and Butler (2007), we conducted various diagnostic tests to arrive at our final model specification. Although the ECM captures the dynamics of our data, it does not take account of whether or not unit effects, period effects, autocorrelation, or heteroskedasticity need addressing. First, through a series of Hausman tests, we concluded that it was necessary to include both unit effects for states and period effects for years. We did so by including dummy variables for all states and years but one. In our tables we omit these coefficients, but the unit effects have the benefit of capturing non-time varying or very slow-moving differences across the states (e.g., political culture), and the year effects account for across time macro trends that impact all of the states at once.[8] Second, after differencing our dependent variable and including unit and period effects, tests for serial autocorrelation revealed it was not present in any of our specifications. Finally, tests also revealed that our panel-corrected standard errors were heteroskedastic; we corrected for this violation by using panel corrected Huber-White robust standard errors.

---

[8] Since including a lagged dependent variable can lead to inconsistent estimators (Woolridge 2002), especially when fixed effects are also present (Angrist and Pischke 2008), we note that in unreported specifications in which we dropped the lagged dependent variable, our results remain unchanged. For purposes of properly interpreting the substantive effects identified by the ECM though, we present the specifications that include the lagged dependent variable.

Our estimated model in equation (1) is:

$$\Delta y_{it} = \lambda y_{it-1} + \beta \Delta X_{it} + \psi X_{it-1} + \alpha_i + \gamma_t + \tau_{it} + u_{it} \qquad (1)$$

where, Δy_{it} equals the change in the antitakeover index between year t and year t-1, y_{it-1} equals

the antitakeover index in year t-1, X represents a vector of independent variables that includes

our corporate independent expenditure ban and additional controls described below, α_i captures

our unit (state) effects, γ_t captures our period (year) effects, τ_{it} captures a state-specific time

trend, and u_{it} is our error term.

3.4 Hypothesis

As corporate independent expenditure ban adoptions at the state-level have historically

been justified as anticorruption measures (see, e.g., Montana's brief in defense of its ban in

American Tradition Partnership, Inc. v. Bullock) and were not adopted specifically in response

to trends in the dependent variable, the threat of legislative endogeneity is low, and we can

regard our variable for independent expenditure bans as largely exogenous to the difference in

the antitakeover index.[9] As a result, we can formally identify the treatment effect

(ψ or $\beta_{CorpIEBan}$) – that is, the average effect of a ban on corporate independent expenditures on

the difference in the antitakeover index within a state – in equation (2) as:

$$\beta \text{ or } \psi_{CorpIEBan} = \mathbf{E}[\Delta y_{it}|y_{it-1}, \alpha_i, \gamma_t, \tau_{it}, \Delta X_{it}, X_{it-1}, CorpIEBan_{it \text{ or } it-1} = 1]$$

$$- \mathbf{E}[\Delta y_{it}|y_{it-1}, \alpha_i, \gamma_t, \tau_{it}, \Delta X_{it}, X_{it-1}, CorpIEBan_{it \text{ or } it-1} = 0] \qquad (2)$$

---

[9] Additionally, since both the dependent variable and the independent variable are the creation of the legislature, it is unlikely that the relationship between the two is endogenous or that trends in antitakeover statutes, which are purposefully chosen by the legislature and relate to changes in firm ownership, place pressure on these very same actors to change campaign finance law rather than the absence of a ban on independent expenditures leading to more pro-management laws. We examine the dynamics of this relationship further by conducting tests for reverse causality/causal simultaneity in section 4.1 and a lead-and-lag analysis of trends in the antitakeover index around independent expenditure bans in section 4.2.

Testing whether or not these coefficients for a ban on corporate independent expenditures equal 0 provides a test of whether or not the presence or threat of independent expenditures affect our dependent variable, and depending upon which coefficient (or both) is significant, we will also know if the effect is immediate, more gradual, or has elements of both adjustments. We hypothesize that if banning independent expenditures reduces agency costs by limiting the potential for managers to use corporate resources to alter public policy in their favor, then when a state adopts such a ban, its antitakeover lawmaking should shift in favor of shareholders.

3.5 Control Variables

In addition to our treatment variable, we included controls for other state-level factors that might affect the demand for and supply of antitakeover statutes within a state. First, to fully capture the demands that the campaign finance regime may allow to be made, we included controls for whether the state had an independent expenditure ban that applied to unions, as well as whether the state allowed contributions to candidates from either corporations or unions.[10] The data for these three variables came from the NCSL. We included the corporate contribution ban to capture other avenues for firm electoral influence, and we included variables capturing union regulation since unions are believed to have supported antitakeover statutes on the grounds that they protected jobs from being shed due to the downstream consequences of the buyouts of local firms by out-of-state actors (Romano 2006).

In addition to including these binary variables, we also calculated an index of campaign finance laws using data from Primo and Milyo (2006). We construct a 0 to 4 index that is a sum of the presence/absence of the following five campaign finance provisions: limits on

---

[10] Of the 23 states that had corporate independent expenditure bans, only 14 also banned union independent expenditures; further, the adoption of these bans did not always occur at the same time in states with both restrictions.

individuals' donations to candidates, limits on organizations' donations to candidates, partial or full public funding for legislative candidates, and partial or full public funding for gubernatorial candidates. To the degree that more regulation insulates public policymakers from political pressure, we would expect higher values of the scale to be associated with less antitakeover lawmaking.

Unions and firms may have demanded changes to antitakeover laws through non-electoral means as well. For unions, their membership is a significant source of political power (Francia 2006), so we included the annual percentage of each state's non farm-based workforce that was unionized, using data collected by Hirsch and Macpherson (2003) and updates on their website. For firms, to capture other means by which management might attempt to influence policy, we constructed the log of the number of business associations registered to lobby in each state-year using data on association founding dates gathered by Spillman (2003).[11] Although it might seem appropriate to adjust this count for state population, doing so could be misleading. Nearly all states will have single associations representing their major industries and sectors, rather than some multiple of these associations as a state enlarges. There will be one state bar association representing attorneys, for example. Economically more diverse states will likely generate more associations, and as a result, the logged count of associations will better reflect their potential impact on policymaking without producing a right skew in the variable's distribution. Consistent with prior expectations, we expect that both of these variables will be positively associated with changes in the antitakeover index.

---

[11] Spillman collected these data from early-2000s editions of the *Encyclopedia of Associations*, *National Trade and Professional Association Directory*, and *Associations Yellowbook* only, which suggests that there may be a mortality bias in our use of her data. That is, although we calculate our counts for each year based upon the year the various organizations listed as their founding, if an organization active in the 1980s did not survive into the 2000s, then it would not be captured in the Spillman data, and thus, there may be a slight undercount of associations, which would bias the estimated coefficient for this variable toward zero.

Management may be more likely to demand and a state more likely to supply antitakeover legislation when antitakeover activity increases. This relationship is expected by the extant literature and is supportive of the idea that many antitakeover statutes are the result of firm-specific demands when prominent firms fear being acquired or are an actual target (Butler 1988; Romano 1988; Roe 1993; Carney 1998). We controlled for this competing explanation by including the annual logged count of the number of active hostile takeover targets in the state using data we gathered from the Spectrum SDC database. If this "putting-out-fires" explanation is correct, then this variable should be positively associated with changes in the antitakeover index.

In addition to these demand-side variables, we included six variables that might affect how willing a state's government is to supply antitakeover laws. First, given the historic association between managers and the Republican Party, we might expect that states with liberal policy histories to be less friendly to management; however, to the degree that unions also may support such laws, ideology may play little role in policy adoption. To measure state policy liberalism, we used the NOMINATE version of Berry et al.'s (1998) institutional ideology score by state-year. This measure computes the relative liberalism and conservatism of the Democratic and Republican parties in each state based on roll-call voting records, and then weights these scores by the degree of Democratic control of the state legislature and the governorship. These common space ideological measures are then also pegged to national politics, obviating the need to adjust for the considerable ideological variation across state parties. The resulting variable ranges from 0 to 1, with higher values reflecting a more liberal environment.

A second factor that may decrease a state's willingness to supply antitakeover statutes is legislative professionalism. We measured legislative professionalism using Squire's (2007)

21

index of professionalism, which is based upon legislator salary, legislative staffing levels, and legislature time-in-session, and was calculated twice during our sample period, in 1986 and 1996. We expect more professional legislatures to be less susceptible to managers' demands, as they are more likely to have a broader of network of expertise upon which to draw, as well as institutions and offices within the legislature that can provide research and analysis.

A final brake on a state's willingness to supply statutes may come from within, in the form of lobbying by the state's pension plan. To the degree that the state itself has ownership stakes in domestic firms or does not want to encourage a race to the bottom between states, it may be less inclined to increase agency costs by entrenching managers. Further, this reluctance likely increases with the size of the pension fund – non-litigation activism of pension funds increases as they have more assets under management (Choi and Fisch 2008). Thus, we included the annual log of the market value of corporate stocks held by the state pension plan.

Finally, we controlled for three variables that might increase a state's willingness to enact antitakeover statutes. States may be willing to pass such laws when the local economy is underperforming (Romano 1987). Thus, we included annual measures of the percent of adults over 18 in the state that were unemployed, as well as the logged value of the state's gross domestic product, using data from the Bureau of Economic Analysis.

The last variable we included in our model forced us to estimate a second specification in which we drop our period fixed effects. As noted in the literature review, antitakeover laws may result from interstate competition or competitive federalism. Although we are agnostic as to whether there is a race between the states and, if so, what direction it goes in, we included a by-year, nationwide average antitakeover index value to capture this potential dynamic. We used a nationwide index of antitakeover statutes – computed as the 38-state average of the antitakeover

index – because the decision of where to incorporate, as opposed to where to locate, rarely involves physical considerations for firms. The internal affairs doctrine in corporate law leads each state to respect the governance structures of firms incorporated in other states.

We provide descriptive statistics for all of these variables in Table 2.

< Insert Table 2 Here >

4. Results & Extensions

We present first the results for our estimation of equation (1); we then turn to two extensions that build on these results and provide a fuller picture of the dynamics of antitakeover lawmaking.

4.1 Main Findings

Consistent with our hypothesis, we find significant and robust results for a corporate independent expenditure ban on the friendliness of antitakeover laws toward management. As Table 3 reveals, the lagged presence of a corporate independent expenditure ban in a state has a negative (for management) impact on the antitakeover index, whether we control for the nationwide antitakeover index directly or indirectly through period effects. Substantively, this long-run average effect is comparable to the legislature producing 1 less pro-management statute when a ban is in place, and given that the average state had 2.5 such statutes on the books during our sample period, this is an economically significant effect that does much to decrease potential agency problems.

< Insert Table 3 Here >

This effect for banning corporate independent expenditures is the only campaign finance effect we uncover, which strengthens our agency cost interpretation. There are no significant associations between antitakeover laws and bans on corporate contributions (which likely are too small to have an effect on legislators' votes or firm value) or bans on union contributions and independent expenditures, nor is there an association between these laws and the restrictions captured by the campaign finance index.

The other statistically significant variables are all consistent with our expectations. In the short run, antitakeover lawmaking is positively associated with increases in business' lobbying activity, unemployment, the number of domestic hostile targets, and union membership. The last two of these variables also have longer-run effects, suggesting that they may have more substantively important associations with antitakeover lawmaking than the immediate demands politicians face due to increased lobbying or a weakening economy. Additionally, the positive and significant association for union membership, in contrast to the lack of results for the union-related campaign finance variables, suggests that union strength is better assessed in terms of membership totals than how liberal campaign finance regulation of unions is.

On the supply-side, there is evidence to suggest that states' willingness to create antitakeover statutes is not associated with their policy liberalism or their legislative professionalism but that their role as investors is associated with decreases in such lawmaking: That is, an increase in a state's pension plan's holdings in corporate stocks is negatively associated with antitakeover protections. Unlike the other associations, however, this last result is not robust to dropping our period effects and instead including a nationwide average antitakeover index. This change, along with the statistical and substantive significance of the average antitakeover index, suggests that states' willingness to resist antitakeover lawmaking is

negatively associated with interstate competition. That is, although it is not the focus of our study, we note that the positive sign on the antitakeover index variable is supportive of a race-to-the-bottom interpretation of interstate competition, at least with regard to antitakeover provisions.

To check our identification strategy, and as a falsification test of these panel results, we ran a conditional fixed effects logistic regression model in which we reversed our causal effect, using the lagged value of the antitakeover index to predict whether a state had a ban on corporate independent expenditures in the current period. That is, this test assessed whether a state's imposition of an expenditure ban was exogenous to and not simultaneous with the level of its antitakeover index (Wooldridge 2006). The results of this regression for both specifications revealed that the lagged antitakeover index was a poor predictor of a state's adoption of an independent expenditure ban: although it was positively signed, it was not statistically significant ($p > 0.178$ in both cases). This test lends credence to our argument that the adoption and implementation of an independent expenditure ban causes corporate governance lawmaking at the state legislative level to shift in a less pro-management direction, rather than this lawmaking influencing the presence of a corporate expenditure ban.

4.2 Extensions

We extended our main analysis in two ways. First, we conducted a lead-and-lag analysis around the timing of the independent expenditure ban to further uncover its dynamics. Second, and based upon the results of our lead-and-lag analysis, we examined the role of electoral competition in mediating the relationship between campaign finance regulations that allow corporate independent expenditures and the extent of antitakeover lawmaking in a state.

25

4.2.1 Lead-and-Lag Analysis

Table 3 reveals that there is a statistically significant and negative relationship between the presence of a corporate independent expenditure ban and a state's antitakeover index but a lead-and-lag analysis around the adoption of such bans can further reveal the dynamics of this relationship. To conduct this analysis, we reran the first specification in Table 3 and included 10 binary indicators to capture the 4 years leading up to reform, the year of reform, and the 5 years following reform in each of the seven adopting states.

Rather than report these results in a table, we present them in Figure 2, which plots the point estimates and 95% confidence intervals for these additional year indicators and illustrates that in the 10 years surrounding a ban adoption, there is a general downward trend in antitakeover lawmaking, with a significant break coming during the year of a ban being in place. Further, the significant changes in antitakeover laws around the adoption of a corporate independent expenditure ban occur prior to reform. That is, before corporate independent expenditures are banned in a state, legislatures engage in policymaking that makes corporate governance laws more favorable to management. The coefficients that achieve statistical significance are those for -3 and -1 years from ban adoption, but the point estimates across all of the years reveal that once an independent expenditure ban is enacted, a state's legislature appears to halt adopting antitakeover laws that favor management at shareholders' expense. Although this trend might raise concerns regarding legislative endogenity, we note again that there is little substantive or statistical evidence for this, as bans on corporate independent expenditures were enacted to combat corruption (which is the only constitutionally permissible justification for such

laws) and that the falsification test presented in the previous section suggested that the causal arrow runs only from independent expenditure bans to changes in antitakeover lawmaking.

< Insert Figure 2 Here >

4.2.2 Competiveness as Mechanism

Since our lead-and-lag analysis revealed that the adoption of an independent expenditure ban serves more to halt antitakeover lawmaking than actually reverse it, in this section we explore the mechanism that leads from allowing independent expenditures to management-friendly votes in legislatures. We hypothesize that legislators will take the threat of corporate independent expenditures more seriously as their electoral vulnerability increases: that is, electoral competitiveness is the mechanism behind the dynamics of this relationship and likely moderates it. To test this hypothesis, we made two changes to our model. First, given the results of our lead-and-lag analysis and for ease of interpretation, we reversed the measurement of all of our campaign finance variables, coding them such that they equal 1 when firms/unions/ individuals are not restricted and 0 when they are. Second, using the Klarner et al. (2011) state legislative election data set, we added an indicator that captured the percentage of seats in the lower chamber of the state legislature that were competitive (defined as the winner having received less than 60% of the vote in the general election) in the most recent prior election, as well as interactions between this variable and our binary indictors for whether or not corporate and union independent expenditures were allowed.[12]

---

[12] We chose this measure of competitiveness since lower chamber elections occur more frequently than upper chamber elections in the vast majority of the states, and since lower chambers are uniformly larger, which lessens the risk that idiosyncratic cycle-specific effects would bias our measure. For Nebraska, which has a unicameral legislature, we used the results for its state senate. Our results are robust to defining competitive seats more conservatively (i.e., as the winner receiving less than 55% of the general election vote).

The results of these re-analyses of both specifications from Table 3 are reported in Table 4. For space reasons, we report only those coefficients relevant to this extension, but the unreported results are consistent with what we found in Table 3. When we added electoral competiveness to our model, the finding of an independent effect for a corporate independent expenditure ban does not persist. However, both our measure of electoral competitiveness and the interaction between competitiveness and allowing corporate independent expenditures are statistically significant, with increasing competitiveness negatively affecting state antitakeover policymaking on its own but positively affecting antitakeover lawmaking when management can make unlimited independent expenditures.

< Insert Table 4 Here >

To assess the substantive impact of these seemingly opposite effects, Figure 3 presents an interaction plot that shows the combined effect of the three variables (corporate independent expenditures allowed, electoral competiveness, and the interaction of these two) as we vary the level of electoral competiveness. The figure reveals that when the percentage of competitive seats surpasses 22%, the combined effect of the variables on antitakeover lawmaking is positive and statistically significant. Such a threshold is not unreasonable in terms of having a real world impact. As the box plot of the observed values of electoral competitiveness below the figure's *x*-axis reveals, just under 50% of our observed cases saw electoral competition at this threshold or above it. This result demonstrates that electoral competiveness significantly mediates the relationship between corporate independent expenditures and antitakeover lawmaking, with legislators being more prone to enact statutes favorable to management when they feel more electorally vulnerable and thus perhaps more threatened by the potential use of independent expenditures.

28

< Insert Figure 3 Here >

5. Robustness Checks

In this section, we discuss three robustness checks to our empirical findings. The first two checks test the robustness of the findings in all four specifications of Tables 3 and 4, and the last check analyzes the adoption of poison pill statutes alone by the states.

5.1 Randomization Inference

As Bertand, Duflo, and Mullainathan (2004) and Conley and Taber (2011) demonstrate, standard errors in models with a differenced dependent variable may be incorrectly estimated when there is either a small number of observational units in total or a small number of observational units that are treated. The specifications in Tables 3 and 4 have 570 observations each; in each, 514 are in the control group, and 56 are in the treatment group. These 55 observations represent the seven states that adopted a corporate independent expenditure ban between 1986 and 2001: Alaska, Connecticut, Minnesota, Ohio, Oklahoma, Rhode Island, and Texas.

To address this criticism, we employed randomization inference (Rosenbaum 2002) on the subsample of 31 states that had not adopted a corporate independent expenditure ban by 1986 and did not do so between 1986 and 2001. To do so, for each specification, we randomly generated 5,000 sets of seven placebo bans in this subsample of 31 states and then re-estimated the specification on each of these 5,000 sets. We assigned our seven placebo bans within each set such that their overtime distribution matched those of the seven states that changed their laws regarding corporate independent expenditures during this period (following, e.g., Frakes 2013).

29

In addition to addressing the issues related to the small number of overall units and treated units, randomization methods can also produce higher quality inferences than those made using clustered standard errors based upon standard asymptotic assumptions (Barrios, Diamond, Imbens, Kolesar 2012). This improvement is especially likely to occur when standard errors may be correlated not only within but also between clusters, as may be the case with state-level data.

< Insert Figure 4 Here >

The four panels in Figure 4 plot histograms of the coefficients we estimated via the 5,000 regressions for each of the four specifications. Each histogram also includes a vertical line that demarks where the specifications' actual estimated coefficient falls in the distribution. In each histogram, the mass of the coefficients is centered on 0, and the specifications' actual coefficients appear in the tails of the distribution, indicating that the values estimated using the actual data were unlikely to have been generated by chance. Using exact inference with these placebo distributions, we generated p-values for the coefficients in the four specifications. These values were 0.001, 0.001, 0.003, and 0.002 for specifications 1 and 2 in Table 3 and specifications 1 and 2 in Table 4, respectively. The results of these placebo tests reveal that, despite the small proportion of treated cases, the treatment effects estimated in Tables 3 and 4 are robust and strongly suggestive of a causal relationship between the implementation of a corporate independent expenditure ban in a state and less favorable antitakeover lawmaking.

5.2 State Rotation

Our second robustness check demonstrates that our treatment effects were not driven by only one of the seven treatment states. This check is particularly important given that only two of the seven states (Minnesota and Texas) adopted bans early in our sample period, when state

30

legislatures passed the majority of the antitakeover statutes. As the four panels in Figure 5 show, the significant results for the coefficients on a corporate independent expenditure ban in Table 3 and on the interaction between electoral competiveness and allowing corporate independent expenditures in Table 4 were robust to excluding from the sample each of the seven treatment states one at a time. In fact, few of the exclusions had any notable impact. When we excluded Minnesota, we saw a wider confidence interval, but the effects of independent expenditures remained significant across all four specifications. When we excluded Connecticut or Rhode Island, the magnitude of our coefficients in Table 3 increased, but these results were due to both of these states having adopted their bans very late in the sample period.

< Insert Figure 5 Here >

5.3 Poison Pill Statute Adoption

Our final robustness check responded to the claim advanced by Coates (2000), Daines (2002), and Kahan (2006), among others, that statutes that endorse firms' adoptions of poison pills obviate the need for other antitakeover statutes. To address this criticism of our use of the broader index, we analyzed the impact of a corporate independent expenditure ban on the adoption only of a statute that endorses poison pill provisions. Ideally, we would have used a survival model to investigate the joint questions of whether and when states adopt such statutes, but such a model could not be estimated, as all 19 of the 38 states in our sample that adopted poison pill statutes between 1986 and 2001 allowed corporate independent expenditures. Since it lacks sufficient variation, our key independent variable simply drops from the survival model, but the lack of such statutes in states with bans is itself strongly suggestive of a negative association between the two.

31

In place of a regression model, we conducted a bivariate analysis of the association between the two variables using a contingency table and, since we had low expected counts across the combinations of corporate independent expenditure ban and poison pill adoption, a Fisher's exact test for association. Given the theoretical arguments we developed in Section 2, we expected that such an association would be negative and thus used a one-tailed Fisher's exact test. The results for this test provided mild evidence ($p < 0.094$) in favor of a negative and significant association between the two, which corroborates our claim of a positive relationship between the legality of corporate independent expenditures and management entrenchment via state law.

6. Discussion & Conclusion

We conclude the paper with discussions of the implications of our findings for campaign finance and corporate governance scholarship, along with several thoughts on how our results speak to broader discussions about the role of corporate money in American politics.

6.1 Implications for Campaign Finance

Our study has two obvious implications for the study of money in politics. First, in terms of a theoretical contribution, this paper provides the strongest test to date of the agency theory of CPA by using a key independent variable and a dependent variable that both capture agency-related problems. Unlike most studies in this tradition, our measure of CPA captures the potential for firms' monies, as opposed to individuals' monies bundled through a firm PAC, to be used in the electoral arena. Additionally, we examine an outcome variable that can accurately capture if CPA is being engaged in a manner contrary to shareholders' interests. In

demonstrating a link between independent expenditures being allowed and more management-friendly public policymaking, we have provided strong empirical evidence in favor of an agency cost interpretation of this electoral form of CPA, in which firms' own monies can be used.

Second, we also extend arguments from the money in politics literature that were developed with regard to PAC donations to the new era of unlimited, nationwide independent expenditures. That is, with regard to business power, we find that corporate independent expenditures are most likely to have an effect on policy outcomes in low salience subsystems, such as corporate governance.[13] Our significant results here stand in contrast to prior work of ours, in which we find no effect for independent expenditure bans on state-level measures of policy liberalism and inequality, as well as minimum wage rates (Werner and Coleman 2012). However, the present results are consistent with prior work on business' influence on public policy that examined the effect of corporate PAC donations on Congressional activity at the committee level (e.g., Hall and Wayman 1990). Combined these findings suggest that in the newly liberalized campaign finance environment at the national level, the effects of independent expenditures will most likely be felt in insulated, low salience policy subsystems.

6.2 Implications for Corporate Governance

Our study has two implications for corporate governance scholars as well. First, and more narrowly, our results suggest that CPA plays an important role in shaping antitakeover legislation in the states. As a result, we would caution those scholars who rest on Romano's (1987) findings to suggest that these laws are exogenously determined. Our findings strongly suggest that business affects antitakeover lawmaking both through campaign finance and through

---

[13] One limitation on this claim though, is that management's most natural competitor (labor) did not compete with it on this issue and instead supported such policies. This alignment of interests does not allow us to speak to the impact of independent expenditures on low salience issues when labor opposes management's aims.

lobbying. As a result, studies that make use of state antitakeover laws to test relationships

between governance provisions and firm value should follow the lead of Armstrong,

Balakrishnan, and Cohen (2012) and Bertrand and Mullainathan (2003) and conduct sensitivity

analyses to ensure that there is not an endogenous relationship between these laws and their

outcome variables.

Second, and more broadly, our results also provide support to those who argue that

scholars of corporate governance need to pay greater attention to the role of politics in the

development of corporate law (see, e.g., Coates 2012; Gourevitch and Shinn 2005; Roe 2003;

Werner 2012).[14] Our analysis here demonstrates that politics plays a central role in antitakeover

lawmaking and that these policies are not simply the product of a state legislature translating the

preferences of a state bar association into law. Further, the battles over the passage and

implementation of the Sarbanes–Oxley and Dodd–Frank Acts provide warrants for this claim at

the federal level, suggesting that politics' role needs to be accounted for at all levels of

government and across various policymaking venues.

6.3 Conclusion

This study exploited changes in state-level campaign finance laws regarding the legality

of corporate independent expenditures to demonstrate that changes in these laws alter states'

antitakeover statutes. Through a panel study of 38 states over 15 years, we found that when a

state allows corporate independent expenditures and has a competitive electoral environment, it

passes more antitakeover laws than when it bans such expenditures or has uncompetitive

legislative elections. This result has important implications for scholars of campaign finance and

---

[14] To gain a sense of how scarce such research is, one only need read Bischoff's (2009) review of 141 articles on corporate governance published between 1997 and 2009, in which he highlights none that focus on the relationship between CPA and governance.

corporate governance. In particular, this finding provides the best evidence to date in favor of an agency cost interpretation of corporate political activity. Further, our results should also be of interest to activists and advocates on various sides of the practical political, legislative, and regulatory debates (see, e.g., Bebchuk and Jackson 2010) concerning the role of corporate money in American politics.

References

Aggarwal, Rajesh K., Meschke, Felix, Wang, Tracey Yue. 2012. "Corporate Political Donations: Investment or Agency." *Business and Politics* 14 (1): Article 3.

Angrist, Joshua D., and Jörn-Steffen Pischke. 2008. *Mostly Harmless Econometrics*. Princeton, N.J.: Princeton University Press.

Ansolabehere, Stephen, John M. de Figueiredo, and James M. Snyder, Jr. 2003. "Why is there So Little Money in U.S. Politics?" *Journal of Economic Perspectives* 17 (1): 105–30.

Ansolabehere, Stephen, Erik C. Snowberg, and James M. Snyder, Jr. 2005. "Unrepresentative Information: The Case of Newspaper Reporting on Campaign Finance." *Public Opinion Quarterly* 69 (2): 213–31.

Armstrong, Christopher S., Karthik Balakrishnan, and Daniel Cohen. 2012. "Corporate Governance and the Information Environment: Evidence from State Antitakeover Laws." *Journal of Accounting and Economics* 53 (1-2): 185–204.

Barrios, Thomas, Rebecca Diamond, Guido W. Imbens, and Michal Kolesár. 2012. "Clustering, Spatial Correlations, and Randomization Inference." *Journal of the American Statistical Association* 107 (498): 578–91.

Barzuza, Michal. 2009. "The State of State Antitakeover Law." *Virginia Law Review* 95 (8): 1973–2052.

Baumgartner, Frank R., Jeffrey M. Berry, Marie Hojnacki, and David C. Kimball. 2009. *Lobbying and Policy Change: Who Wins, Who Loses, and Why*. University of Chicago Press.

Bebchuk, Lucian Arye. 1992. "Federalism and the Corporation: The Desirable Limits on State Competition in Corporate Law." *Harvard Law Review* 105 (7): 1435–1510.

Bebchuk, Lucian Arye, and Alma Cohen. 2003. "Firms' Decisions Where to Incorporate." *Journal of Law and Economics* 46 (4): 383–425.

Bebchuk, Lucian Arye, Alma Cohen, and Allen Ferrell. 2002. "Does the Evidence Favor State Competition in Corporate Law?" *California Law Review* 90 (6): 1775–1822.

Bebchuk, Lucian Ayre, and Allen Ferrell. 1999. "Federalism and Corporate Law: The Race to Protect Managers from Takeovers." *Columbia Law Review* 99 (5): 1168–99.

Bebchuk, Lucian Ayre, Alma Cohen and Alan Ferrell. 2009. "What Matters in Corporate Governance?" *Review of Financial Studies* 22 (2): 783–827.

Bebchuk, Lucian Ayre, and Robert J. Jackson. 2010. "Political Speech: Who Decides?" *Harvard Law Review* 124 (1): 83–117.

Beck, Nathaniel. 2001. "Time-Series–Cross Section Data: What Have We Learned in the Past Few Years?" *Annual Review of Political Science* 4: 271–93.

Berry, William D., Evan J. Ringquist, Richard C. Fording, and Russell L. Hanson. 1998. "Measuring Citizen and Government Ideology in the American States, 1960–93." *American Journal of Political Science* 42 (2): 327–48.

Bertrand, Marianne, Esther Duflo, and Sendhil Mullainathan. 2004. "How Much Should We Trust Differences-in-Differences Estimates." *Quarterly Journal of Economics* 119 (1): 249–75.

Bertrand, Marianne, and Sendhil Mullainathan. 1999. "Executive Compensation and Incentives: The Impact of Takeover Legislation." Working Paper No. 6830, National Bureau of Economic Research.

Bertrand, Marianne, and Sendhil Mullainathan. 2003. "Enjoying the Quiet Life? Corporate Governance and Managerial Preferences." *Journal of Political Economy* 111 (5): 1043–75.

Bischoff, Steven M. 2009. "Recent Corporate Research in the United States: The Highlights."

Working Paper.

Butler, Henry M. 1988. "Corporation-Specific Anti-Takeover Statutes and the Market for Corporate Charters." *Wisconsin Law Review* 1988 (3): 365–384.

Carney, William J. 1998. "The Production of Corporate Law." *Southern California Law Review* 71 (4) 715–780.

Cary, William L. 1974. "Federalism and Corporate Law: Reflections upon Delaware." *Yale Law Journal* 83 (4): 663–705.

Chappell, Henry W., Jr. 1982. "Campaign Contributions and Congressional Voting: A Simultaneous Probit-Tobit Model." *Review of Economics and Statistics* 64 (1): 77–83.

Choi, Stephen J., and Jill E. Fisch. 2008. "On Beyond CalPERS: Survey Evidence on the Developing Role of Public Pension Funds in Corporate Governance." *Vanderbilt Law Review* 61 (2): 315–354.

Coates, John C., IV. 2000. "Takeover Defenses in the Shadow of the Pill: A Critique of the Scientific Evidence." *Texas Law Review* 79 (2): 271–382.

Coates, John C., IV. 2012. "Corporate Politics, Governance, and Value Before and After *Citizens United*." *Journal of Empirical Legal Studies* 9 (4): 657–96.

Cohen, Moshe. 2012. "Corporate Governance Law: Firm Heterogeneity and the Market for Corporate Domicile." Working paper, Columbia University.

Conley, Timothy G., and Christopher R. Taber. 2011. "Inference with 'Difference in Differences' with a Small Number of Policy Changes." *Review of Economics and Statistics* 93 (1): 113–25.

Daines, Robert. 2001. "Does Delaware Law Improve Firm Value?" *Journal of Financial Economics* 62 (3): 525–58.

Daines, Robert. 2002. "The Incorporation Choices of IPO Firms." *New York University Law Review* 77 (6): 1559–1611.

Davidoff, Steven M. 2012. "Takeover Theory and the Law and Economics Movement." In *Research Handbook on the Economics of Corporate Law*, Clair A. Hill and Brett H. McDonnell, eds. Northhampton, Mass.: Edward Elgar Publishing.

Easterbrook, Frank H., and Fischel, Daniel R. 1991. *The Economic Structure of Corporate Law*. Cambridge, Mass.: Harvard University Press.

Ferris, Stephen P., Robert M. Lawless, and Gregory Noronha. 2006. "The Influence of State Legal Environments on Firm Incorporation Decisions and Values." *Journal of Law, Economics and Policy* 2 (1): 1–28.

Fisch, Jill E. 2000. "The Peculiar Role of the Delaware Courts in the Competition for Corporate Charters." *University of Cincinnati Law Review* 68 (4): 1061–1100.

Frakes, Michael. 2013. "The Impact of Medical Liability Standards on Regional Variations in Physician Behavior: Evidence from the Adoption of National-Standard Rules." *American Economic Review* 103 (1): 257–76.

Francia, Peter L. 2006. *The Future of Organized Labor in American Politics*. New York: Columbia University Press.

Gompers, Paul A., Joy L. Ishii, and Andrew Metrick. 2003. "Corporate Governance and Equity Prices." *Quarterly Journal of Economics* 118 (1): 107–55.

Gourevitch, Peter A., and James J. Shinn. 2005. *Political Power and Corporate Control: The New Global Politics of Corporate Governance*. Princeton, N.J.: Princeton University Press.

Grier, Kevin B., Michael C. Munger, and Brian E. Roberts. 1994. "The Determinants of Industry Political Activity, 1978–1986." *American Political Science Review* 88 (4): 911–26.

Hackl, Jo Watson, and Rosa Anna Testani. 1988. "Second Generation State Takeover Statutes and Shareholder Wealth: An Empirical Study." *Yale Law Journal* 97 (6): 1193–231.

Hadani, Michael, and Douglas A. Schuler. 2012. "In Search of El Dorado: The Elusive Financial Returns on Corporate Political Investments." *Strategic Management Journal* 34 (2): 165–81.

Hall, Richard L., and Frank W. Wayman. 1990. "Buying Time: Moneyed Interests and the Mobilization of Bias in Congressional Committees." *American Political Science Review* 84 (3): 797–820.

Hays, Laurie. 1988. "Delaware's New Anti-Takeover Law Is Contested by Campeau, Black & Decker." *Wall Street Journal*: February 3.

Hirsch, Barry T., and David A. Macpherson. 2005. "Union Membership and Coverage Database from the Current Population Survey: Note." *Industrial and Labor Relations Review* 56 (2): 349–54.

Jensen, Michael C., and William H. Meckling. 1976. "Theory of the Firm: Managerial Behavior, Agency Costs and Ownership Structure." *Journal of Financial Economics* 3 (4): 305–60.

Kahan, Marcel. 2006. "The Demand for Corporate Law: Statutory Flexibility, Judicial Quality, or Takeover Protection." *Journal of Law, Economics, and Organizaion* 22 (2): 340–65.

Karpoff, Jonathan M., and Paul H. Malatesta. 1995. "State Takeover Legislation and Share Values: The Wealth Effects of Pennsylvania's Act 36." *Journal of Corporate Finance* 1 (3-4): 367–82.

Keim, Gerald, and Ashgar Zardkoohi. 1988. "Looking for Leverage in PAC Markets: Corporate and Labor Contributions Considered." *Public Choice* 58 (1): 21–34.

Klarner, Carl E., William D. Berry, Thomas M. Carsey, Malcolm Jewell, Richard G. Niemi, Lynda W. Powell, and James M. Snyder, Jr. 2011. "State Legislative Election Returns, 1967–2010." Ann Arbor, Mich.: Inter-university Consortium for Political and Social Research.

Klumpp, Tilman, Hugo M. Mialon, and Michael A. Williams. 2012. "Money Talks: The Impact of *Citizens United* on State Elections." Emory University Legal Studies Research Paper No. 12-218.

La Raja, Raymond J., and Brian F. Schaffner. 2012. "The (Non-)Effects of Campaign Finance Spending Bans on Macro Political Outcomes." Working paper, University of Massachusetts, Amherst.

Lindblom, Charles E. 1977. *Politics and Markets: The World's Political–Economic Systems*. New York: Basic Books.

Mallette, Paul, and Robert Spagnola. 1994. "State Takeover Legislation: The Political Defense." *SAM Advanced Management Journal* 59 (3): 15–23.

Manne, Henry G. 1965. "Mergers and the Market for Corporate Control." *Journal of Political Economy* 73 (2): 110–20.

Matheson, John H., and Brent A. Olson. 1991. "Shareholder Rights and Legislative Wrongs: Toward Balanced Takeover Legislation." *George Washington Law Rev*iew 59 (6): 1425–1568.

Meirowitz, Adam. 2008. "Electoral Contests, Incumbency Advantages, and Campaign Finance." *Journal of Politics* 70 (3): 681–99.

Mutch, Robert. 1988. *Campaigns, Congress, and Courts: The Making of Federal Campaign Finance Law*. Westport, Conn.: Praeger Publishers.

Roe, Mark J. 1993. "Takeover Politics." In *The Deal Decade: What Takeovers and Leveraged Buyouts Mean for Corporate Governance*, Margaret M. Blair, ed. Washington, D.C.: Brookings Institution.

Roe, Mark J. 2003. *Political Determinants of Corporate Governance: Political Context, Corporate Impact*. New York: Oxford University Press.

Romano, Roberta. 1985. "Law as a Product: Some Pieces of the Incorporation Puzzle." *Journal of Law, Economics, and Organization* 1 (2): 225–83.

Romano, Roberta. 1987. "The Political Economy of Antitakeover Statutes." *Virginia Law Review* 73 (1): 111–99.

Romano, Roberta. 1988. "The Future of Hostile Takeovers: Legislation and Public Opinion." *University of Cincinnati Law Review* 57 (2): 457–505.

Romano, Roberta. 2006. "The States as Laboratory: Legal Innovation and State Competition for Corporate Charters." *Yale Journal on Regulation* 23 (2): 209–47.

Rosenbaum, Paul R. 2002. "Covariance Adjustment in Randomized Experiments and Observational Studies (with Discussion)." *Statistical Science* 17 (3): 286–327.

Sitkoff, Robert H. 2002. "Corporate Political Speech, Political Extortion, and the Competition for Corporate Charters." *University of Chicago Law Review* 69 (3): 1103–66.

Smith, Mark A. 2000. *American Business and Political Power: Public Opinion, Elections, and Democracy*. University of Chicago Press.

Snyder, James M., Jr. 1990. "Campaign Contributions as Investments: The U.S. House of Representatives, 1980–1986." *Journal of Political Economy* 98 (6): 1195–1227.

Spencer, Douglas, and Abby Wood. 2012. "*Citizens United*, States Divided: Evidence of Elasticity in Independent Expenditures." Working paper, University of California at Berkeley.

Spillman, Lynette. 2003. "National Business Associations, United States, 2003." Ann Arbor, Mich.: Inter-university Consortium for Political and Social Research.

Squire, Peverill. 2007. "Measuring State Legislative Professionalism: The Squire Index Revisited." *State Politics and Policy Quarterly* 7 (2): 211–27.

Subramanian, Guhan. 2004. "The Disappearing Delaware Effect." *Journal of Law, Economics, and Organizaion* 20 (1): 32–59.

Subramanian, Guhan. 2002. "The Influence of Antitakeover Statures on Incorporation Choice: Evidence on the 'Race' Debate and Antitakeover Overreaching." *University of Pennsylvania Law Review* 150 (6): 1795–1873.

Vogel, David J. 1978. "Why Businessmen Distrust Their State: The Political Consciousness of American Corporate Executives." *British Journal of Political Science* 8 (1): 45–78.

Werner, Timothy. 2012. *Public Forces and Private Politics in American Big Business*. Cambridge, UK: Cambridge University Press.

Werner, Timothy, and John J. Coleman. 2012. "Assessing the Potential Effects of *Citizens United*: Evidence from the States." Working paper, University of Texas at Austin.

Wilson, Sven E., and Daniel M. Butler. 2007. "A Lot More to Do: The Sensitivity of Time-Series Cross-Section Analyses to Simple Alternative Explanations." *Political Analysis* 15 (2) 101–23.

Winkler, Adam. 2004. "Other People's Money: Corporations, Agency Costs, and Campaign Finance Law." *Georgetown Law Journal* 92 (5): 871–940.

Winter, Ralph K., Jr. 1977. "State Law, Shareholder Protection, and the Theory of the Corporation." *Journal of Legal Studies* 6 (2): 251–92.

Wooldridge, Jeffrey M. 2002. *Econometric Analysis of Cross Section and Panel Data*. Cambridge, Mass.: MIT Press.

Wooldridge, Jeffrey M. 2006. *Introductory Econometrics: A Modern Approach*. 3rd ed. Mason, Ohio: Thomson-South Western.

Yang, Catherine, and Joseph Weber. 1988. "Is Delaware About to Harpoon the Sharks?" *Business Week*: January 25.

Yasar, Mahmut, Carl H. Nelson, and Roderick M. Rejesus. 2006. "The Dynamics of Exports and Productivity at the Plant Level: A Panel Data Error Correction Model (ECM) Approach." In *Panel Data Econometrics: Theoretical Contributions and Empirical Applications*, Badi H. Baltagi, ed. Bingley, UK: Emerald Group Publishing.

Table 1: Timing of State Bans on Corporate Independent Expenditures

State	Year in Place	State	Year in Place
Alabama	-	*Montana*	1912
Alaska	1996	Nebraska	-
Arizona	1978	Nevada	-
Arkansas	-	New Hampshire	-
California	-	New Jersey	-
Colorado	2002	New Mexico	-
Connecticut	2000	New York	-
Delaware	-	*North Carolina*	1973
Florida	-	*North Dakota*	1981
Georgia	-	**Ohio**	1995
Hawaii	-	**Oklahoma**	1994
Idaho	-	Oregon	-
Illinois	-	*Pennsylvania*	1937
Indiana	-	**Rhode Island**	1998
Iowa	2003	South Carolina	-
Kansas	-	South Dakota	2007
Kentucky	1974	*Tennessee*	1972
Louisiana	-	**Texas**	1987
Maine	-	Utah	-
Maryland	-	Vermont	-
Massachusetts	1975	Virginia	-
Michigan	1976	Washington	-
Minnesota	1988	*West Virginia*	1908
Mississippi	-	*Wisconsin*	1973
Missouri	-	*Wyoming*	1977

Data collected form the National Conference of State Legislatures. " - " denotes that the state did not implement a corporate independent expenditure ban prior to such bans being invalidated by *Citizens United*. States in *italics* were dropped from our sample since they adopted a ban prior to the beginning of our sample period; states in **bold** are those that we used for statistical identification since they adopted a ban during our sample period.

Table 2: Descriptive Statistics

	Mean	Std. Dev.	Min.	Max.
Corporate Independent Expenditure Ban	0.10	0.30	0	1
Union Independent Expenditure Ban	0.09	0.29	0	1
Corporate Contribution Ban	0.24	0.43	0	1
Union Contribution Ban	0.09	0.28	0	1
Campaign Finance Index	1.49	1.17	0	4
% Unionized	14.00	6.17	3.30	30.30
Lobbying Business Associations (logged)	0.84	0.61	0	2.32
State Policy Liberalism	0.51	0.24	0	0.98
Legislative Professionalism	0.20	0.12	0.03	0.66
Pension Plan Stock Holdings (logged)	6.12	1.06	0	7.67
Hostile Takeover Targets (logged)	0.13	0.24	0	1.11
% Unemployed	5.22	1.67	2.20	12.60
Gross State Product (logged)	10.92	0.46	9.96	12.13
Average Antitakeover Index	2.51	0.49	1.08	2.84

Table 3: An Error Correction Model of State Antitakeover Statutes, 1987–2001

		Estimate	(Std. Error)	Estimate	(Std. Error)
Antitakeover Laws	L	-0.400***	(0.045)	-0.398***	(0.045)
Corporate Independent	L	-0.439*	(0.260)	-0.445*	(0.260)
Expenditure Ban	D	-0.243	(0.306)	-0.250	(0.305)
Union Independent	L	0.359	(0.293)	0.360	(0.292)
Expenditure Ban	D	0.453	(0.405)	0.460	(0.403)
Corporate Contribution Ban	L	0.197	(0.377)	0.200	(0.375)
	D	0.096	(0.297)	0.094	(0.294)
Union Contribution Ban	L	0.054	(0.404)	0.055	(0.403)
	D	-0.461	(0.436)	-0.463	(0.435)
Campaign Finance Index	L	-0.037	(0.042)	-0.038	(0.041)
	D	-0.042	(0.056)	-0.039	(0.055)
Business Associations Lobbying	L	1.551	(1.512)	1.534	(1.509)
(logged)	D	7.351***	(2.206)	7.294***	(2.196)
Hostile Takeover Targets	L	0.241**	(0.115)	0.223**	(0.108)
(logged)	D	0.162*	(0.091)	0.152*	(0.087)
% Unionized	L	0.039*	(0.019)	0.039*	(0.019)
	D	0.035*	(0.019)	0.037*	(0.019)
% Unemployed	L	0.019	(0.018)	0.018	(0.017)
	D	0.057*	(0.028)	0.062**	(0.025)
Gross State Product	L	0.588	(0.705)	0.559	(0.693)
(logged)	D	1.024	(1.548)	0.785	(1.480)
State Policy Liberalism	L	-0.132	(0.120)	-0.132	(0.119)
	D	-0.185	(0.163)	-0.174	(0.152)
Legislative Professionalism	L	0.641	(0.773)	0.513	(0.726)
	D	0.753	(1.432)	0.920	(0.972)
Pension Plan Stock Holdings	L	-0.020	(0.044)	-0.019	(0.043)
(logged)	D	-0.065*	(0.039)	-0.062	(0.039)
Average Antitakeover Index	L			0.457***	(0.081)
	D			1.270***	(0.256)
State Fixed Effects?		Y		Y	
Year Fixed Effects?		Y		N	
State-Specific Time Trend?		Y		Y	
n (observations)		570		570	
n (states)		38		38	
r^2		0.434		0.433	

L = Lag term; D = Difference term

* $p < 0.10$, ** $p < 0.05$, , *** $p < 0.01$

Error correction OLS model with robust panel corrected standard errors. Dependent variable is the differenced state antitakeover law index by state-year. The 12 states that adopted a corporate independent expenditure ban prior to 1986 (see Table 1 for a list) were excluded from our sample.

Table 4: Independent Expenditures, Electoral Competitiveness, and Antitakeover Statutes

		Estimate	(Std. Error)	Estimate	(Std. Error)
Antitakeover Laws	L	-0.402***	(0.045)	-0.400***	(0.045)
Corporate Independent	L	-0.353	(0.409)	-0.355	(0.403)
Expenditures Allowed	D	-0.112	(0.395)	-0.112	(0.391)
Union Independent	L	-0.119	(0.377)	-0.106	(0.368)
Expenditures Allowed	D	-0.452	(0.456)	-0.439	(0.451)
Electoral Competitiveness	L	-0.029**	(0.014)	-0.029**	(0.014)
	D	-0.012	(0.012)	-0.012	(0.012)
Corporate IE Allowed	L	0.032**	(0.014)	0.033**	(0.013)
* Competitiveness	D	0.017	(0.013)	0.018	(0.013)
Union IE Allowed	L	0.005	(0.012)	0.004	(0.011)
* Competitiveness	D	0.001	(0.011)	-0.002	(0.010)
Average Antitakeover Index	L			0.433***	(0.082)
	D			1.299***	(0.261)
Other Controls?		Y		Y	
State Fixed Effects?		Y		Y	
Year Fixed Effects?		Y		N	
State-Specific Time Trend?		Y		Y	
n (observations)		570		570	
n (states)		38		38	
r²		0.445		0.445	

L = Lag term; D = Difference term

* $p < 0.10$, ** $p < 0.05$, , *** $p < 0.01$

Error correction OLS model with robust panel corrected standard errors. Dependent variable is the differenced state antitakeover law index by state-year; both specifications include the additional control variables from Table 3, which are suppressed here for space. The 12 states that adopted a corporate independent expenditure ban prior to 1986 (see Table 1 for a list) were excluded from our sample.
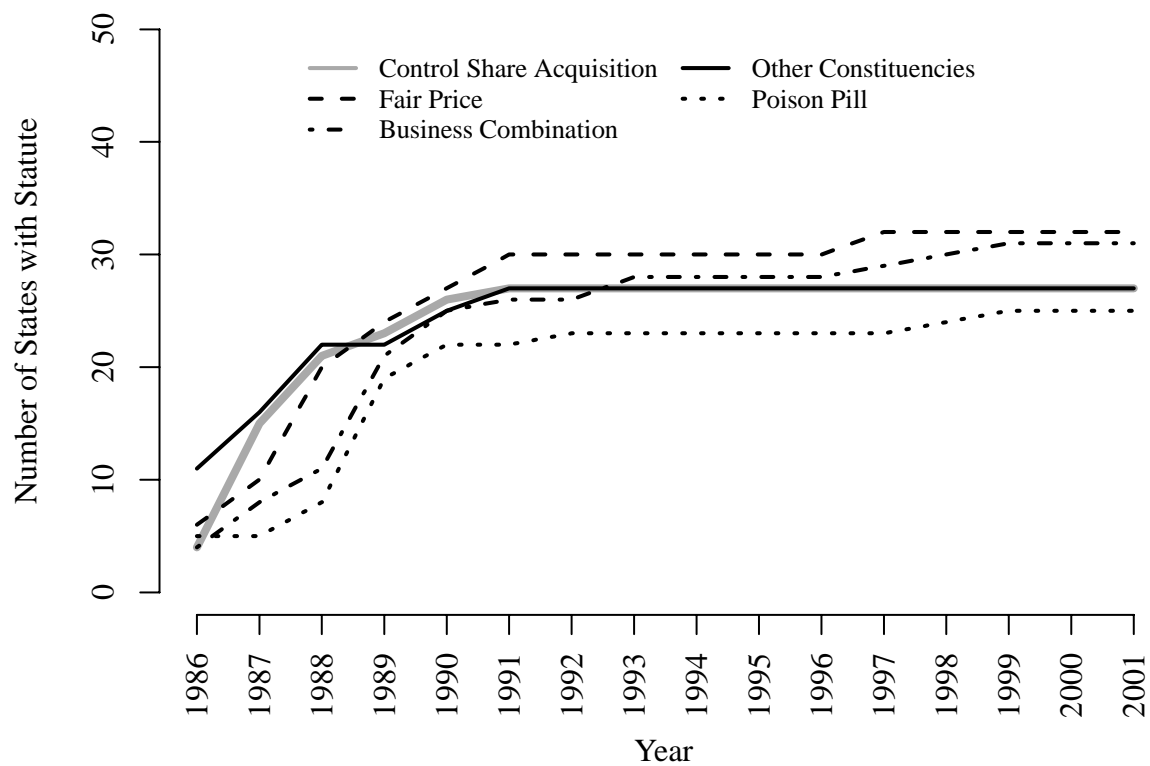
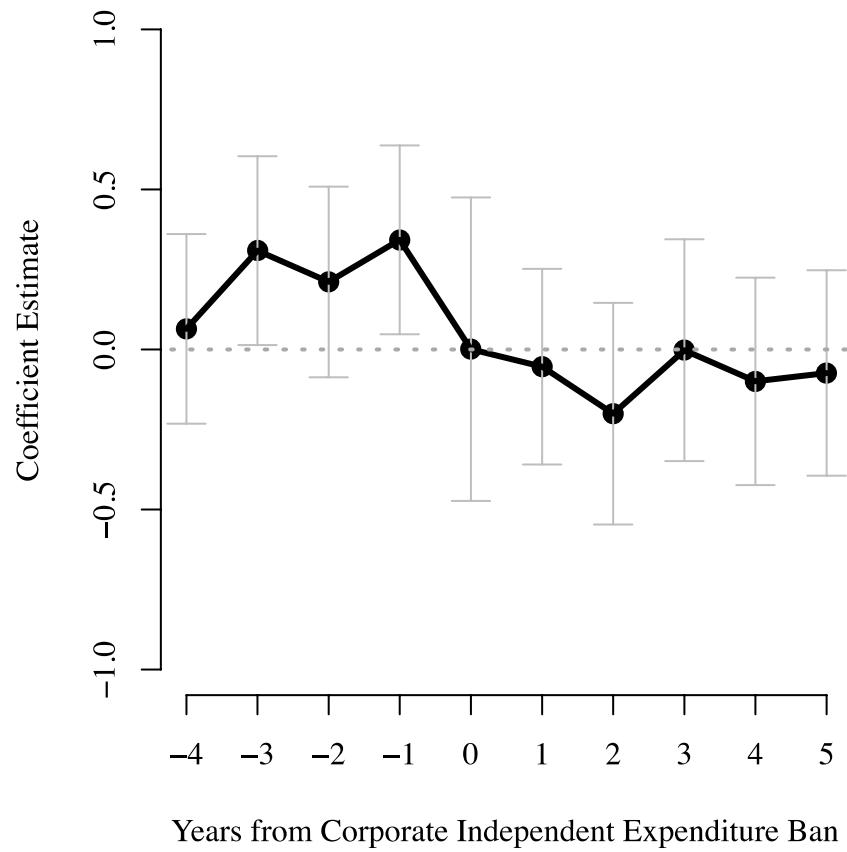Figure 1: Number of states by year with each of five antitakeover statutes.

Figure 2: Coefficient estimates for the leads and lags of the absence of a corporate expenditure ban, estimated by adding lead and lag indicators to the first specification in Table 3. 95% confidence intervals are reported.
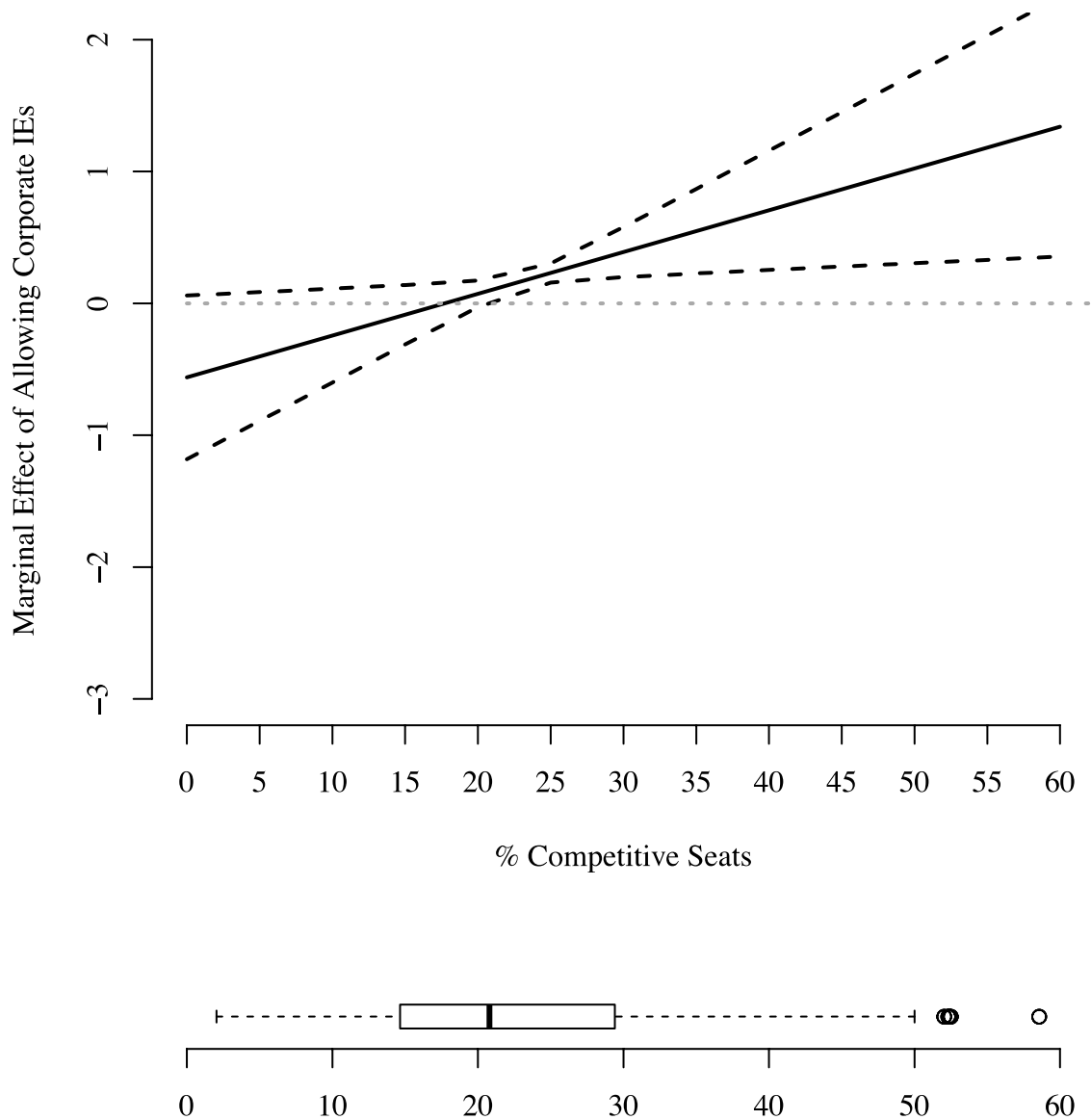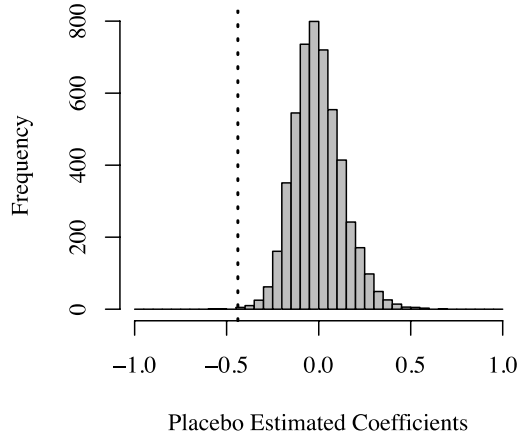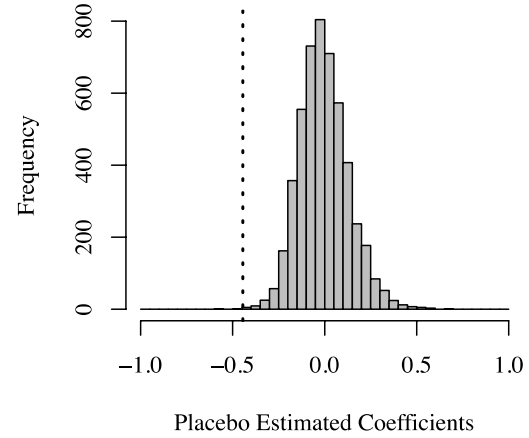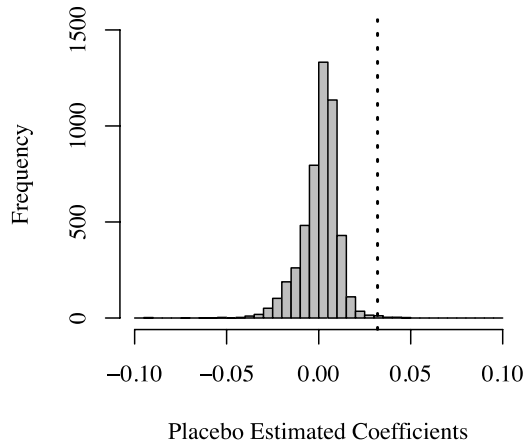
Figure 3: The marginal effect of allowing corporate independent expenditures on the difference in the number of antitakeover statutes, as estimated in the first specification of Table 4. The box plot below the *x*-axis of the scatterplot displays the marginal distribution of the percentage of competitive seats. 95% confidence interval is reported.
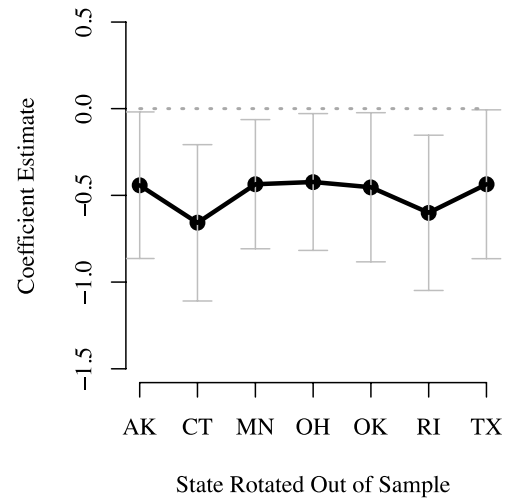
(a)

(b)

(c)
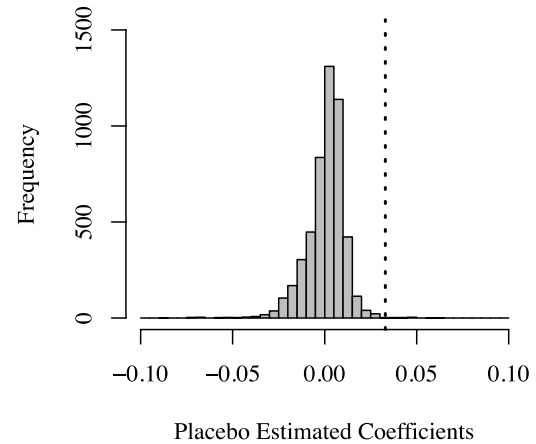
(d)

Figure 4: Coefficient estimates for the presence of a corporate independent expenditure ban (panels a and b) and the interaction of the absence of such a ban and electoral competiveness (panels c and d), as generated by 5,000 re-estimations of the specifications in Tables 3 and 4, respectively. For each re-estimation, the seven states that adopted an independent expenditure ban during the sample period were dropped from the sample, and seven of the remaining 31 states were assigned "placebo" changes in their corporate independent expenditure laws during the sample period. The dashed vertical lines demark where the actual estimated coefficients from Tables 3 and 4 would fall in these distributions.
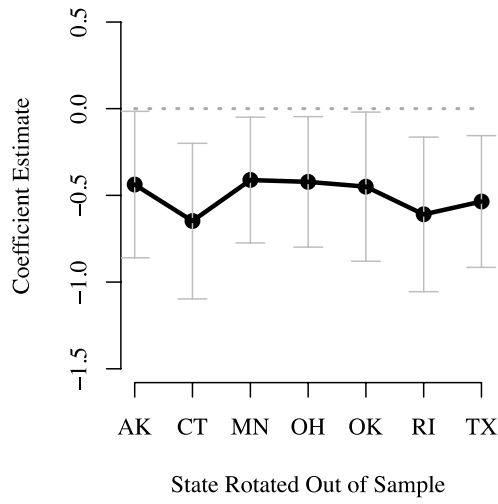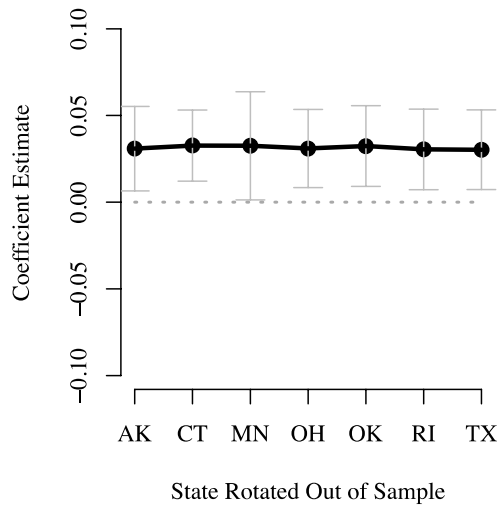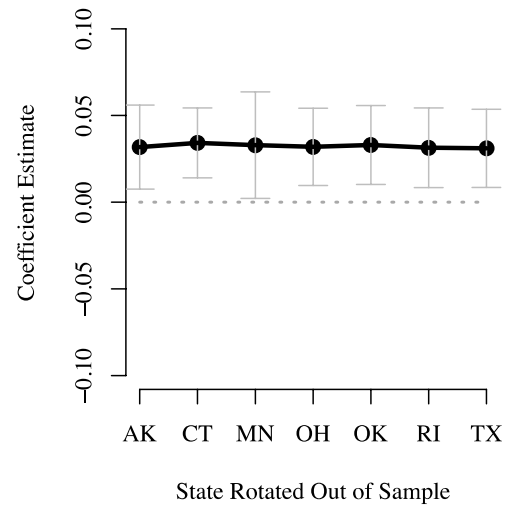
Figure 5: Coefficient estimates for the presence of a corporate independent expenditure ban (panels a and b) and the interaction of the absence of such a ban and electoral competiveness (panels c and d), as generated by seven re-estimations each of the specifications in Tables 3 and 4, respectively. The state denoted on the *x*-axis was rotated out of the sample for the re-estimation. 95% confidence intervals are reported.