

Stakeholder Orientation and Firm Value*

K.J. Martijn Cremers,^a Scott B. Guernsey,^b Simone M. Sepe^c

First draft: February 5, 2018

Current draft: December 27, 2019

Abstract

We analyze the relation between enhanced director discretion to consider stakeholder interests (“stakeholder orientation”) and firm value by exploiting the adoption of directors’ duties laws (DDLs) as a quasi-natural experiment. We find that DDLs result in significant increases in shareholder value, especially in more innovative firms and those with stronger stakeholder relationships. DDLs also improve employees’ job security, financial soundness and innovation. These benefits, however, are offset in firms with more severe agency problems. Our results suggest that stakeholder orientation improves the commitment toward stakeholders and reduces contracting costs in many firms, but one size does not fit all.

Keywords: Stakeholder orientation, antitakeover statutes, firm value, bonding

JEL classifications: G32, G34, K22, O32

* We thank seminar participants at HEC Paris, the Toulouse School of Economics, the University of California at Los Angeles, the University of Cambridge, and the University of Pennsylvania, as well as participants at the 2019 Adam Smith Corporate Finance Workshop, the 2019 American Finance Association meeting, the Fourth Annual Cass M&A Research Centre Conference, the 2019 Financial Management Association (FMA) European Conference, the 2019 FMA meeting, the 2019 National Bureau of Economic Research Law and Economics Program meeting, the 2019 North American Society for Financial Studies Cavalcade Annual meeting, the 2019 Penn Institute for Law and Economics Spring Corporate Roundtable, and the 11th Principles for Responsible Investments (PRI) Academic Network Conference. For useful comments and discussions, we thank Ashwini Agrawal (discussant), Rui Albuquerque (discussant), Julian Atanasov (discussant), Robert Bartlett (discussant), Catherine Casamatta, Jean-Edouard Colliard, Brian Gibbons (discussant), Stuart Gillan, Andrey Golubov, Alexander Guembel, Victoria Ivashina, Dirk Jenter (discussant), Christine Jolls, Oğuzhan Karakaş, Bart Lambrecht, Hamed Mahmudi, Pedro Matos (discussant), William Megginson, Scott Moeller, Sophie Moinas, Vikram Nanda (discussant), Bang Dang Nguyen, Sébastien Pouget, Raghavendra Rau, Matthew Serfling, Holger Spamann (discussant), Jason Sturgess, David Thesmar, and Sébastien Thevoux-Chabuel. This paper won the “Best Paper Award in Corporate Finance/Financial Institutions” at the 2019 FMA European Conference.

^a University of Notre Dame, Mendoza College of Business. Email address: mcremers@nd.edu.

^b University of Cambridge, Judge Business School. Email address: s.guernsey@jbs.cam.ac.uk.

^c University of Arizona, James E. Rogers College of Law and Toulouse School of Economics. Email address: sms234@email.arizona.edu.

Internet Appendix results are available at: https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3299889.

1. Introduction

Since the pioneering work of [Bertrand and Mullainathan \(1999, 2003\)](#) and [Garvey and Hanka \(1999\)](#), many studies have used the staggered adoption of state antitakeover laws to identify changes in corporate governance that are plausibly exogenous to individual firms (see [Karpoff and Wittry, 2018](#), for a review). Directors' duties laws (DDLs) – also known as “corporate constituency statutes” or “stakeholder laws” or “non-shareholder constituency statutes” ([Bainbridge, 1992](#)) – are one kind of state antitakeover legislation that has now been adopted by 35 U.S. states. While these laws' exact provisions vary, their core content is the same: the statutes enable directors to consider the impact of corporate decisions (such as whether to accept an acquisition offer) on an expanded set of stakeholder interests, including the interests of employees, suppliers, customers, creditors and local communities.

Relative to other antitakeover laws, however, DDLs have not been studied extensively in the finance literature ([Karpoff and Wittry, 2018](#)), perhaps because of the long-held prevalence of the shareholder model of the corporation. Under this model, share value maximization provides the exclusive benchmark for managerial performance ([Friedman, 1970](#); see also [Friedman, 1962](#)), while discretion to consider the interests of other stakeholders is interpreted as enabling management to rationalize self-serving actions (e.g., [Jensen, 1986](#); [Tirole, 2001](#); [Bertrand and Mullainathan, 2003](#); [Pagano and Volpin, 2005](#)). On the other hand, DDLs engendered a heated debate among legal scholars when they were introduced, reviving perennial questions about the appropriate allocation of power between boards, shareholders and other stakeholders ([Bainbridge, 1992](#); [Bratton, 1989, 1993](#)). The main echo of that debate in the finance literature was the inclusion of DDLs in the “G-Index” of [Gompers et al. \(2003\)](#) as one of 24 governance features capturing weaker shareholder rights.¹

More recently, however, both finance scholars and business leaders have started paying renewed attention to what we term “stakeholder orientation,” that is, greater director discretion to consider stakeholder interests in corporate decision-making. [Magill et al. \(2015\)](#), for example, developed a theoretical model in which firms that exclusively focus on shareholder maximization are exposed to certain “endogenous risks” arising from their own investment and production decisions. These risks generate negative externalities on stakeholders and leads them to

¹ Another example in the finance literature is [Alexander et al. \(1997\)](#), who investigate the DDLs of three U.S. states.

underinvest in their relationship with the firm, ultimately decreasing firm value. Along similar lines, [Hart and Zingales \(2017, p. 270\)](#) recently concluded that “shareholder value maximization is not the appropriate goal of a company” when a firm’s activities are “non-separable,” i.e., carry externalities that cannot be undone through other activities due to market or contract incompleteness.² [Allen et al. \(2015\)](#) also provide theoretical work on stakeholder orientation in a model of imperfect competition, finding that stakeholder-oriented firms take more precautions to avoid bankruptcy in order to protect their employees and suppliers.

Along similar lines, recent empirical studies document that empowering boards to protect stakeholder interests against the threat of a takeover might serve a positive corporate governance function for some firms, increasing the welfare of both stakeholders and shareholders ([Cen et al., 2016](#); [Cremers et al., 2017](#); [Johnson et al., 2015, 2019](#)). Perhaps most importantly, major governance players like large institutional investors and the CEOs of the largest American corporations themselves seem increasingly willing to accept, or even advocate for, a corporate model with enhanced stakeholder orientation ([Flammer and Kacperczyk, 2015](#); [Sorkin, 2018](#)). For example, in August 2019, the nearly 200 CEOs who are members of the Business Roundtable issued a groundbreaking statement on corporate purpose challenging the shareholder model orthodoxy and calling for a governance model where corporations also invest in their employees, protect the environment and deal non-opportunistically with their suppliers and customers.³

Motivated by these developments, in this paper we empirically analyze the shareholder value implications of stakeholder orientation in corporate decision-making by exploiting the quasi-natural experiment provided by the staggered adoption of DDLs over the period 1983 to 2006. Other recent studies have examined the impact of DDLs on innovation ([Atanassov, 2013a](#); [Flammer and Kacperczyk, 2015](#)), procurement contracts ([Flammer, 2015](#)), investments by high fiduciary duty institutions ([Geczy et al., 2015](#)), and the cost of debt ([Gao et al., 2019](#)). As far as we know, however, this paper is the first to systematically examine the impact of DDLs on stakeholder orientation and shareholder value.⁴

² As contract incompleteness is a source of market incompleteness, we henceforth only refer to market incompleteness.

³ See <https://www.businessroundtable.org/business-roundtable-redefines-the-purpose-of-a-corporation-to-promote-an-economy-that-serves-all-americans>.

⁴ Earlier studies (e.g., [Atanassov, 2013a](#); [Flammer and Kacperczyk, 2015](#)) considered the effect of DDLs on firm value but purely in auxiliary tests. For instance, [Atanassov \(2013a\)](#) only specifies $\ln(\text{Tobin's } Q)$ regressions that interact DDLs with other antitakeover statutes, while [Flammer and Kacperczyk \(2015\)](#) find a marginally significant correlation with Tobin’s Q . Meanwhile, both studies do not control for the confounding effects of unobserved, time-

Our main finding is that the passage of DDLs results in an increase in the Tobin's Q of the affected firms that is both statistically and economically significant. This finding is robust to various methodologies, including first difference regressions; the incorporation of possible selection effects through the creation of a matched sample; and a battery of alternative value measures including stock returns, profitability ratios, and a portfolio approach that can be interpreted as a long-term event study. The effect of DDLs on Tobin's Q is more pronounced for firms where stakeholder investments are more relevant (e.g., employee- or creditor-intensive firms, firms with a large customer, or in a strategic alliance) or firms that are more innovative. We also show that, after these laws are passed, employees gain in job security, financial soundness improves, and investments in innovation increase. Overall, our results support the view that stakeholder orientation promotes long-term value creation for many firms by fortifying their operational strategy and reducing their contracting costs with stakeholders (the "bonding hypothesis"). Nevertheless, these benefits tend to be offset in firms with more severe agency problems where it is more likely that enhanced director discretion might be abused in the exclusive interest of management, pointing to a heterogeneous effect of stakeholder orientation in corporate decision-making.

We begin our analysis by addressing the concern that specific state-level circumstances can explain a state's propensity to pass a DDL. We test this hypothesis using a Cox proportional hazard model with year fixed effects as well as a linear probability model with state-of-incorporation and year fixed effects to investigate whether the passage of these laws relates to state-level institutional, political and economic characteristics (e.g., prior adoption of other relevant corporate laws, the incorporating state's M&A activity, GDP per capita and growth rate, and state unionization rates). We are unable to find any strong or consistent significant predictors for the adoption of DDLs, suggesting that the passage of these laws is not associated with the then-prevailing market and economic environments, which is consistent with our central identification assumption that DDLs identify changes in corporate governance that are plausibly exogenous.

We then estimate the relationship between the adoption of DDLs and the long-term shareholder value of firms incorporated in the enacting states over the period 1983 to 2015 using a difference-

variant heterogeneity within industries and other antitakeover laws and, thus, their models are misspecified according to Gormley and Matsa (2014, 2016) and Karpoff and Wittry (2018). The latter controls are especially relevant as we find not including dummies for the other antitakeover laws attenuates the value effect of DDLs toward zero.

in-differences approach that includes firm, U.S. Census division-by-year⁵, and industry-by-year fixed effects. We find that the increased orientation of directors toward stakeholder interests results in a positive and statistically significant increase in the Tobin's Q of DDL-affected firms, with an economic significance of 3.5% relative to the sample average. Regressions of changes in Tobin's Q on an indicator for the passage of DDLs give similar results. Results are further robust to interchanging division-by-year fixed effects with headquarter state-by-year fixed effects.⁶

We next consider whether selection effects (such as reincorporation) might explain the increase in value in the firms incorporated in states that adopt a DDL. We construct a sample that matches the firms in each of the 35 DDL-enacting states (i.e., the treated firms) in the year before the relevant DDL is adopted ($t-1$) to a control firm operating in the same industry, headquartered in the same U.S. Census division and with similar ex-ante characteristics but incorporated in a state without a DDL. We find that the difference in the Tobin's Q between treated and control firms, as well as in firm characteristics capturing the importance of stakeholder relationships (and hence possible selection effects), is insignificant in the three-year period preceding the laws' passage. Conversely, and consistent with our main sample regressions, the difference in the Tobin's Q is significantly positive in the three-year period following the laws' adoption.

We further verify that our main and matched sample findings on Tobin's Q are robust to using a variety of alternative measures of firm value, such as risk-adjusted excess stock returns, Total Tobin's Q (as proposed in [Peters and Taylor, 2017](#)), and profitability ratios. In another alternative approach, we perform a long-term event study based on our matched sample using portfolios that buy (sell) treated (control) stocks around the time their (matched sample counterpart's) state of incorporation adopts a DDL. The resulting long-short portfolio has a positive and statistically significant alpha of about 0.6% per month in the period surrounding the adoption of DDLs.

We then examine potential transmission mechanisms through which stakeholder orientation in director decision-making contributes to increased long-term firm value and profitability. Drawing on prior theoretical and empirical work, we focus on the "bonding hypothesis" of takeover

⁵ The U.S. Census Bureau classifies census divisions by grouping states and the District of Columbia into the following nine geographical subdivisions: New England, Middle Atlantic, East North Central, West North Central, South Atlantic, East South Central, West South Central, Mountain, and Pacific. We interact a firm's headquarter division-of-location with year dummies to control for unobserved, time-varying sources of location-based heterogeneity that may correlate with DDL adoptions and firm value.

⁶ We confine the use of state-by-year fixed effects to a robustness analysis because the majority of affected firms and non-Delaware unaffected firms are incorporated and headquartered in the same state, which means that the estimates using state-by-year fixed effects are identified by a (quite) limited set of firms.

defenses ([Johnson et al., 2015](#)). Under this hypothesis, empowering boards with enhanced discretion to protect stakeholder interests against the disruption caused by takeovers reduces uncertainty in stakeholder investments, improving contracting arrangements and increasing long-term shareholder value ([Knoeber, 1986](#); [Laffont and Tirole, 1988](#); [Shleifer and Summers, 1988](#)).

Consistent with this hypothesis, we find that in the subset of DDL-covered firms in which stakeholder relationships are likely more relevant – such as firms that are more reliant on its employees, have a large customer, are in a strategic alliance, are more creditor-intensive, or where long-term investments are more important – experience a larger increase in Tobin's Q. We also find that employees of DDL-covered firms have more job stability, creditors gain from DDL-firms being more financially sound, and DDL-firms increase innovative activity (where stakeholders' firm-specific investments provide key inputs to the firm's innovation).

These heterogeneous effects of greater stakeholder orientation in corporate decision-making imply that enhanced director discretion does not uniformly enhance shareholder value. Indeed, firms where agency problems are more severe and where enhanced director discretion is more likely to be abused for management's own interest – such as firms with longer CEO tenure, stronger union influence on management, underutilized assets, higher operating expenses or more free cash-flows – do not experience any shareholder value gain (or loss) from DDLs.

Our study makes two central contributions. First, it adds to the recent theoretical and empirical scholarship examining the relationship between stakeholder orientation in director decision-making and firm value ([Allen et al., 2015](#); [Johnson et al., 2015, 2019](#); [Magill et al., 2015](#); [Cen et al., 2016](#); [Cremers et al., 2017](#); [Hart and Zingales, 2017](#)), showing that shareholder value increases when directors are allowed enhanced discretion to consider stakeholder interests in corporate decision-making (via DDLs), with this effect being more pronounced for firms with stronger stakeholder relationships and that are more innovative.

Second, our paper contributes to the broader literature examining the value implications of corporate governance (e.g., [Demsetz and Lehn, 1985](#); [Morck et al., 1988](#); [Lang and Stulz, 1994](#); [Yermack, 1996](#); [Daines, 2001](#); [Gompers et al., 2003](#); [Bebchuk et al., 2009](#); [Giroud and Mueller, 2011](#); [Cuñat et al., 2012](#); [Cremers and Ferrell, 2014](#)) and, in particular, the literature that uses state statutes as an external shock (e.g., [Bertrand and Mullainathan, 1999, 2003](#); [Garvey and Hanka, 1999](#); [Qiu and Yu, 2009](#); [Francis et al., 2010](#); [Giroud and Mueller, 2010](#); [Atanassov, 2013a, 2013b](#); [Gormley and Masta, 2016](#); [Karpoff and Wittry, 2018](#)), documenting evidence that the value

increase experienced by DDL-firms can be explained by the bonding hypothesis of takeover defenses. Under this hypothesis, greater stakeholder orientation in director decision-making via DDLs creates value for some firms by enabling them to more credibly commit their contractual performance to their stakeholders, where this commitment helps reduce hold-up ([Acharya et al., 2014](#)) and underinvestment problems ([Magil et al., 2015](#); [Hart and Zingales, 2017](#)) as well as obtain more favorable contracting terms ([Johnson et al., 2015](#)).

2. Legal background

In the typical account of DDLs as given in the finance literature, these laws enable directors to consider the welfare interests of all firm stakeholders, in addition to the interests of shareholders, in deciding whether to approve or resist an acquisition offer (e.g., [Gompers et al., 2003](#); [Karpoff and Wittry, 2018](#)). This account, however, limits the relevance of DDLs to only decisions related to acquisitions, which constitutes an overly restrictive interpretation of the actual features of these laws.

In fact, most DDLs apply significantly more broadly. Only nine states enacted DDLs that expand the scope of directors' discretion in the takeover context or change-of-control situations exclusively.⁷ In the other 26 enacting states, DDLs enable the consideration of stakeholder interests in any director decision ([Keay, 2013](#)). In addition, 24 out of 35 enacting states specify in their DDLs that considering the long-term interest of the corporation *also* provides an appropriate legal basis for board decisions ([Keay, 2013](#)),⁸ suggesting that these states view the protection of non-shareholder interests as instrumental to the maximization of long-term firm value.

In light of the broader relevance of DDLs, their theoretical and policy implications are not limited to the takeover context, but extend to quintessential questions about the role and purpose of the corporation ([Berle, 1931, 1932](#); [Dodd, 1932](#)). And, indeed, during the 1990s the adoption of these laws occasioned renewed debate between contractarian and institutionalist corporate law scholars. Contractarians defended a restrictive interpretation of DDLs arguing that directors are shareholders' exclusive agents ([Jensen and Meckling, 1976](#); [Easterbrook and Fischel, 1983](#)), while

⁷ These states are Iowa, Kentucky, Louisiana, Maryland, Missouri, Oregon, Rhode Island, South Dakota, and Tennessee. Further, four states (Connecticut, South Dakota, Tennessee, and Vermont) restrict the applicability of DDLs to public companies only, and two states (Georgia and Maryland) make enhanced director discretion an opt-in choice by allowing corporations to include an ad-hoc provisions in their corporate charters.

⁸ Only Georgia, Indiana, Louisiana, Maine, Maryland, Missouri, Nebraska, Tennessee, and Wisconsin do not expressly authorize the consideration of the long-term interest of the corporation. Conversely, Idaho makes the consideration of this interest a mandatory, rather than a permissive, requirement for director decision-making.

institutionalists supported an expansive interpretation of these laws on the argument that only boards with enhanced authority can efficiently coordinate economic activities within complex social organizations (Bratton, 1989, 1993). In more recent times, the emerging legal consensus is that DDLs do not trump shareholder primacy, even though they expand the zone of directorial discretion and board authority (Fisch, 2006; Barzuza, 2009; Geczy et al., 2015). This means that DDLs protect directors against fiduciary actions brought by shareholders disgruntled with decisions that also consider stakeholder interests. But they do not grant stakeholders an “offensive” claim against directors to force them to consider their interests (Keay, 2013).⁹ In sum, DDLs discretionally enable, rather than mandate, directors to embrace stakeholder orientation.

3. Data and empirical strategy

3.1. Sample selection

The data comprising our main sample comes from several sources and consists of all firms (excluding utilities and financials) in the merged CRSP-Compustat database. We require that our sample firms are incorporated and headquartered in the U.S. with non-missing and non-negative book value of assets and net sales, and without missing observations for the variables used in our main tests. Appendix Table A1 provides variable definitions. We begin our sample in 1983 to avoid overlap with the adoption and invalidation of first-generation antitakeover laws¹⁰ and end it in 2015, five years after the DDL of Texas (which is the last enacting state) became applicable to all firms incorporated in the state.¹¹ The resulting main sample consists of 101,989 firm-year observations.

3.2. Definition of variables and summary statistics

⁹ DDLs provide permissive (rather than mandatory) language in all 35 enacting states. Connecticut’s law was the only one that originally mandated that directors “shall” consider other constituencies, but the statute was amended in 2010 to replace the mandatory language with a permissive grant of authority (“may”).

¹⁰ First-generation laws were enacted by 38 states between 1968 and 1981 and provided substantial takeover protection to firms incorporated in enacting states. They were invalidated by the U.S. Supreme Court decision in *Edgar v. Mite Corp.* in 1982. As detailed in Karpoff and Wittry (2018), these laws likely create estimation noise when examining the effect of second-generation laws. We therefore start the panel in 1983.

¹¹ Texas adopted a DDL in 2003 but allowed firms to voluntarily opt-in prior to 1/1/2006. However, even after this date, only newly incorporated Texas firms were bound to the DDL, while firms incorporated in the state prior to 2006 were still allowed to voluntarily opt-in. It is only after 1/1/2010 that Texas’ law became directly applicable to all firms incorporated in the state. Following Barzuza (2009) and Karpoff and Wittry (2018), we consider 2006 as the effective date of Texas’ DDL and, hence, refer to the effective dates of DDLs in other states too; although, in all the other enacting states the effective dates always coincide with the adoption years.

The key explanatory variable, *DDL*, is an indicator of whether a firm's state of incorporation has an effective DDL. Our information on when DDLs become effective comes from [Barzuza \(2009\)](#) and [Karpoff and Wittry \(2018\)](#). We provide a catalogue of each of the enacting states' effective month/year dates in [Internet Appendix Table IA1](#). We construct *DDL* using historical incorporation information from Compact Disclosure and the CRSP Historical U.S. stock database, which is available from the University of Chicago (rather than directly through WRDS). Compact Disclosure covers historical incorporation information from 1986 to 2006 and CRSP spans the period 1990 to 2015. We approximate the state of incorporation for the years 1983 to 1985 by backfilling firm-year incorporation data using the oldest data point available (generally from Compact Disclosure, and otherwise from CRSP). This assumes that firms did not reincorporate between 1983 and 1985, though we verify that our results are robust if we use samples that commence in any year between 1983 and 1985. With the effective dates and historical incorporation data, we set *DDL* equal to one in the effective year and afterwards for all firms incorporated in the enacting states, and zero in the years prior to the effective date, and always equal to zero for corporations incorporated in states that never adopt a DDL.

Our main dependent variable is firm value, which we primarily measure using Tobin's Q (Q), consistent with prior work investigating the value of various corporate governance arrangements (e.g., [Demsetz and Lehn, 1985](#); [Morck et al., 1988](#); [Lang and Stulz, 1994](#); [Yermack, 1996](#); [Himmelberg et al., 1999](#); [Daines, 2001](#); [Palia, 2001](#); [Gompers et al., 2003](#); [Bebchuk et al., 2009](#); [Cuñat et al., 2012](#); [Cremers et al., 2017](#)). Following [Fama and French \(1992\)](#), we measure Q as the ratio of market to book value of assets using financial data from Compustat. We acknowledge, however, that Q is an imperfect measure of firm value as, for example, it can also proxy for a firm's growth opportunities (e.g., [Smith and Watts, 1992](#); [Jung et al., 1996](#); [Parise, 2018](#)) and is subject to potential measurement error ([Erickson and Whited, 2000, 2012](#); [Abel, 2018](#); [Bartlett and Partnoy, 2018](#)).

Therefore, in robustness tests, we analyze the following alternative measures of firm value: stock returns using both annual regressions (*Stock Returns*) and a portfolio approach (*Monthly Stock Returns*) (returns data comes from the CRSP database); Total Tobin's Q (*Total Q*), a modified version of Q that includes intangible capital in the denominator ([Peters and Taylor, 2017](#)) (data for *Total Q* comes from the WRDS database: Peters and Taylor Total Q); and

measures of profitability, such as return on assets (*ROA*) and return on capital employed (*ROCE*) (data for these accounting measures come from Compustat).

We include control variables that the corporate governance literature shows are associated with Tobin's *Q*: the natural logarithm of a firm's total assets ($\ln(\text{Assets})$) and one plus its number of years in the Compustat database ($\ln(\text{Age})$), the Herfindahl-Hirschman index (*HHI*) based on a firm's three-digit standard industrial classification (SIC) code, sales growth (*SG*), an indicator for whether a firm has negative net income for the fiscal year (*Loss*), debt-to-equity ratio (*DEQ*), firm liquidity (*FLIQ*), capital expenditures scaled by total assets ($\text{CAPX}/\text{Assets}$), research and development expenditures divided by net sales ($\text{R\&D}/\text{Sales}$), and a firm's level of institutional ownership (*IO*). The financial data used to construct these controls comes from Compustat, while the data for *IO* is provided by Thomson Reuters.

Following [Karpoff and Wittry \(2018\)](#), all of our main tests include indicator variables for the other four most common forms of state antitakeover legislation: business combination law (*BCL*), control share law (*CSL*), fair price law (*FPL*), and poison pill law (*PPL*). We control for a firm's headquartering state's economic and political conditions by including: the natural logarithm of the state's gross domestic product per capita ($\ln(\text{GDPPC})$), its GDP growth rate (*GDP Growth*), and the percentage of the state's U.S. House of Representatives that belong to the Democratic Party (*Political Rep*). Data for these controls comes from either the U.S. Bureau of Economic Analysis or the U.S. House of Representatives. Lastly, to mitigate the influence of extreme outliers we winsorize continuous variables in our sample at the 2.5% level in both tails and adjust dollar values for inflation using 2015 dollars.¹²

We present summary statistics in [Internet Appendix Table IA2](#). In particular, [Panel A \(Panel B\)](#) reports the mean, standard deviation, median, and 25th and 75th percentiles for the variables used in our main (auxiliary) tests over the period 1983 to 2015. The average *Q* for all firm-year observations in our main sample is 1.92 with a standard deviation of 1.39, while 26.3% of firm-years in our dataset are affected by a DDL. Overall, the descriptive statistics for our variables are similar to those in the existing corporate governance literature.

3.3. Identification strategy

¹² Our results remain unchanged if instead we winsorize continuous variables at the 1% or 5% level.

Our identification strategy assumes that absent the adoption of DDLs, the financial value of firms incorporated in states that passed these laws would have evolved similarly as firms incorporated in states that did not pass them. To validate this assumption of “parallel trends,” we test whether the enactments of DDLs coincide with other factors such as local economic and political conditions or the prior adoptions of other anti-takeover laws or laws related to stakeholders, as all of these factors could also correlate with firm value and disrupt identification.

To this end, we follow a similar approach as [Acharya et al. \(2014\)](#) and [Serfling \(2016\)](#) and examine the predictability that a state will pass a DDL, taking two alternative approaches. First, we estimate a Cox proportional hazard model, where the failure events take shape as the adoption of these laws. We include year fixed effects in the models to control for transitory U.S.-wide (e.g., macroeconomic) factors affecting the likelihood that a state adopts a DDL. Second, we estimate linear probability models (LPMs), where the dependent variable is an indicator for whether or not a state has enacted a DDL. LPMs allow us to include state of incorporation fixed effects (in addition to year fixed effects) to account for time-invariant factors within the incorporation state. Under either approach we exclude states from the sample after they adopt a DDL.

[Table 1](#) presents the results, where columns 1-4 (5) show hazard rates (marginal effects) from the Cox models (LPM). The analysis is performed at the state level and covers the period 1983 to 2015. The predictor variables (outlined below) are pre-determined, as we lag them by one year ($t-1$), and each of the continuous predictors are standardized to have a mean of zero and unit variance in order to facilitate comparisons across coefficients. We estimate robust standard errors, adjusted for clustering at the incorporation state level.

Column 1 includes dummies to indicate whether a state has previously passed any of the following other major antitakeover laws: *BCL*, *CSL*, *FPL*, or *PPL* ([Karpoff and Wittry, 2018](#)). Column 2 adds indicators for whether the state has passed other laws related to stakeholders such as any of the three wrongful discharge laws (*WDL*; [Autor et al., 2006](#)), the inevitable disclosure doctrine (*IDD*; [Klasa et al., 2018](#)), or R&D tax credits (*R&D Credit*; [Wilson, 2009](#)).¹³ In the same column, we incorporate measures for M&A intensity, including the number of acquisition bids received by firms in a specific state divided by the total number of acquisition bids in the U.S. that

¹³ These laws are related to stakeholders in the following manner: WDLs make it more costly for a firm to fire an employee unjustly; the IDD prevents industry rivals from poaching key employees from a firm in order to constrain the potential loss of trade secrets; and R&D tax credits make investments in innovative activity (of which stakeholders' firm-specific investments are a key input) less costly.

same year (*M&A Intensity*); the number of unsolicited and hostile bids received by firms in a state divided by the total number of unsolicited and hostile bids in that same year (*Hostile M&A Intensity*); the transaction value of all completed M&A deals in a state over the total transaction value of all completed M&A deals in that same year (*M&A Deal Size*). Finally, Column 2 considers union intensity by adding measures for the percentage of a state's workers covered by a collective bargaining agreement (*Union Coverage*) and the percentage of a state's workers who are union members (*Union Membership*). Both columns show that the passage of DDLs are unrelated to other previously adopted corporate laws (that directly affect a firm's anti-takeover defenses or stakeholders) as well as levels of M&A and union intensity.

We include more state-level economic and political predictors in Column 3, such as: $\ln(GDP_{PC})$, *GDP Growth*, *Political Rep*, and the natural logarithm of the state's total population ($\ln(Population)$) and its unemployment rate (*Unemployment Rate*). As in columns 1-2, each of the hazard rates in column 3 are insignificantly different from one.

Another endogeneity concern with DDL adoptions is that states may pass these laws in response to deteriorating or increasing values of the states' incorporating firms – i.e., reverse causality. Columns 4 and 5 test this concern by including variables for state-year (*SY*) medians of *Q*, stock returns (*Return*), and *ROA* measured across all sample firms incorporated (*Inc*) in a state, respectively, considering both levels and changes (Δ). We do not find evidence in either column that levels or changes in pre-determined value measures predict the adoption of DDLs, helping to rule out reverse causality.

In column 4, the hazard rate on *Political Rep* is marginally significant at the 10% level, indicating that states with U.S. House of Representatives that are primarily Democrats are less likely to pass DDLs. However, this result might reflect the importance of some other time-invariant state-level factor, as the inclusion of incorporation state fixed effects renders *Political Rep* insignificant while the explanatory power more than doubles ($2.7=0.189/0.07=R^2/Pseudo R^2$). This suggests that the adoption of DDLs is at most only marginally, negatively correlated with the fraction of the states U.S. House of Representatives that belong to the Democratic Party. We thus conclude that overall the evidence from Table 1 is consistent with our central assumption that the introduction of DDLs provides an exogenous shock to the scope of stakeholder orientation in directors' decision-making.

3.4. Methodology

Our methodology to estimate the value of stakeholder orientation for shareholders primarily employs a difference-in-differences (DD) regression model, comparing changes in Tobin's Q among firms that are incorporated in states with an effective DDL to those of firms incorporated in states without such legislation. In particular, we estimate:

$$Q_{ijl_{st}} = \beta DDL_{st} + \alpha' X_{ijst} + \gamma_i + \omega_{lt} + \lambda_{jt} + \varepsilon_{ijl_{st}}, \quad (1)$$

where $Q_{ijl_{st}}$ measures the value of firm i , in industry j , located in division l , incorporated in state s , in year t . The main explanatory variable, DDL , is an indicator equal to one if state s has an effective DDL by year t , while X_{ijst} represents a vector of control variables as outlined in [Section 3.2](#). However, for robustness, some of our tests exclude the firm-level controls because some of these endogenous variables are also likely impacted by DDLs and could bias our coefficients ([Angrist and Pischke, 2009](#); [Roberts and Whited, 2013](#)).

In each of our specifications, we also include firm fixed effects, γ_i , to control for time-invariant unobserved heterogeneity within different firms, and U.S. Census division-by-year, ω_{lt} , and industry-by-year interacted fixed effects, λ_{jt} , to account for possible sources of time-varying, unobserved heterogeneity at a firm's headquarter division and industry level ([Gormley and Matsa, 2014, 2016](#)). We define Census division dummies using the U.S. Census Bureau's nine geographical subdivisions (New England, Middle Atlantic, East North Central, West North Central, South Atlantic, East South Central, West South Central, Mountain, and Pacific)¹⁴ and we measure industries with Fama-French 49 industry classifications. We cluster standard errors by state of incorporation.

The use of Census division-by-year fixed effects means that we compare within firm changes in Q for companies affected by DDLs to those for firms unaffected by the legislation but located in the same U.S. Census division. This approach ensures that our regression estimates are robust to a multitude of potential sources of unobserved time-varying factors that could bias our findings, including local economic conditions which have been shown to spill across neighboring states ([Heider and Ljungqvist, 2015](#)). Following [Gormley and Matsa \(2016\)](#), we use a firm's historical

¹⁴ Prior studies have used U.S. Census region-by-year fixed effects (e.g., [Autor et al., 2006](#); [Acharya, et al., 2014](#)), where the regions are: Northeast, Midwest, South, and West. We use divisions since they provide a more granular geographical measurement, although, our findings are unchanged if we use region-by-year fixed effects instead.

headquarter location to assign its division-of-location since this is generally where a firm's major plants and operations are located (Henderson and Ono, 2008).

Additionally, we include industry-by-year fixed effects to further mitigate concerns that a differential, time-varying trend within industries might bias our analysis. For instance, prior work shows that merger waves tend to occur within industries (e.g., Mitchell and Mulherin, 1996; Maksimovic and Phillips, 2001; Rhodes-Kropf et al., 2005; Duchin and Schmidt, 2013). If the staggered adoption of DDLs across states is correlated with M&A activity – though Table 1 suggests this is not the case – and potentially correlated with other unobservable characteristics that also impact firms' Tobin's Q, our use of industry-by-year fixed effects should account for this confounding variation. The division-by-year fixed effects also help address these concerns since most industries tend to cluster by geography (Ellison and Glaeser, 1997, 1999; Ellison et al., 2010).

A common approach in the literature is to employ the use of state-by-year fixed effects (Gormley and Matsa, 2014, 2016; Karpoff and Wittry, 2018). However, this strategy is most appropriate when a majority of sample firms are incorporated and located in different states. For instance, in Gormley and Matsa's (2016, p. 437) study, they note that "[they] are able to obtain estimates for the BC laws' effect even after including state-by-year fixed effects because more than 60% of [their] firms are incorporated and located in different states." This does not apply to our case, as the state of Delaware where most firms are incorporated never adopted a DDL, and most firms incorporated outside of Delaware tend to be incorporated in the state where their headquarters is located. In particular, less than 33% (35%) of the non-Delaware firm-years that are affected (unaffected) by DDLs in our sample are incorporated and located in different states – whereas more than 99% of Delaware-incorporated firms are headquartered in a different state. Due to these circumstances, there is very little remaining variation for the *DDL* indicator after including state-by-year fixed effects, which limits statistical power and restricts the counterfactuals almost entirely to Delaware firms. To deal with these econometric issues, we use U.S. Census division-by-year fixed effects along with headquarter state-level controls (*Ln(GDP_{PC})*, *GDP Growth*, and *Political Rep*) as an alternative approach.

4. The shareholder value of stakeholder orientation

4.1. Main sample

Table 2 begins our examination of the value relevance of stakeholder orientation for shareholders by reporting estimates from DD regressions of Q on DDL over the period 1983 to 2015. In each column, we include firm and industry-by-year fixed effects and estimate robust standard errors clustered by state of incorporation. Columns 2-5 also include division-by-year fixed effects. In columns 3-5, we include firm-level controls ($Size$, $Ln(Age)$, HHI , SG , $Loss$, DEQ , $FLIQ$, $CAPX/Assets$, $R\&D/Sales$, and IO), while columns 4-5 also control for other antitakeover laws (BCL , CSL , FPL , and PPL) and column 5 for headquarter state-level controls ($Ln(GDPPC)$, $GDP Growth$, and $Political Rep$).

In column 1, without any controls, we find that firms incorporated in a state with an effective DDL experience an increase in Q of roughly 5.8 percentage points relative to firms incorporated in states without such legislation but operating in the same industry. This represents an economically significant increase of 3% ($=0.058/1.918$) relative to the sample mean of Q . Column 2 shows that DDLs have even larger positive value implications when the counterfactual firms are restricted to industry rivals in the same U.S. Census division, as covered firms have Q s that are 6.7 percentage points higher than those of firms incorporated in states without a DDL. This represents an economically significant increase of 3.5% ($=0.067/1.918$) relative to the unconditional sample mean. In column 3 where we add firm-level controls, the coefficient reduces slightly (point estimate = 0.061).

With the added controls of column 4 (i.e., other antitakeover laws) and column 5 (i.e., headquarter state level GDP per capita, GDP growth rate, and political representation), the DDL coefficient's economic significance increases relative to column 3. Including these additional indicators in column 4 separates the effect of DDLs from that of other antitakeover statutes.¹⁵ Consistent with Karpoff and Wittry (2018), the results in column 4 and 5 suggest that not incorporating important legal and institutional factors can create an omitted variable bias – which in our case attenuates the estimate of the main variable of interest toward zero. This increase in coefficient magnitude in columns 4 and 5 may also be due to a reduction in estimation noise, since some of the DDLs were adopted in the same year as one or more of the other antitakeover statutes.

¹⁵ In unreported tests, we separately regress Q on the interaction of DDL with each of the other four antitakeover laws. We do not find evidence that coverage by a stakeholder law combined with any of the other types of antitakeover laws is associated with differential changes in Q .

The point estimate in column 5 is robust to the exclusion of any DDL state from the analysis. [Internet Appendix Figure IA1](#) provides a graphical representation of this robustness. Specifically, on the y -axis we plot each of the 35 separate coefficients we estimate from regressions that omit a single DDL state with the excluded state shown on the x -axis, along with their corresponding upper and lower 95% confidence interval bounds. The point estimates are similar to the results in [Table 2](#), with magnitudes that range from 0.050 to 0.079 and t -statistics which fall between 1.69 and 2.55. Thus, it doesn't appear that an unobserved, state-specific factor (or an outlier state) is driving our main finding.

We next move to [Figure 1](#) and study the timing of changes in firm value relative to the timing of DDLs. This analysis helps to assess the validity of the main assumption underlying our identification strategy, namely that firms incorporated in both DDL and non-DDL states have similar trends in firm value in the years before a DDL is adopted.

Following prior literature (e.g., [Acharya et al., 2014](#); [Gormley and Matsa, 2016](#); [Serfling, 2016](#)), we regress Q on firm, division-by-year, and industry-by-year fixed effects, indicators for other state antitakeover laws, and dummy variables signifying the year relative to the effective date of the DDLs. We create these dummies for up to 10 years before and after a DDL becomes effective, where, for example, the final dummy equals one if 7 or more years have elapsed since the introduction of the directors' legislation. We plot the corresponding coefficient for the \pm five relative-year dummies, i.e., relative to the effective date of the laws. We indicate statistical significance by including 95% confidence intervals, constructed from robust standard errors clustered by state of incorporation, and plot green triangular (blue diamond) markers when the coefficient's confidence interval is different from zero (i.e., where we reject the null hypothesis at the 5% (10%) significance level).

[Figure 1](#) shows that firms in DDL states had similar Q s as firms in non-DDL states in the five years prior to the effective date of the laws. In contrast, the 95% confidence intervals do not contain zero after the laws become effective, indicating that firm value is significantly higher for the covered firms afterwards. Overall, this evidence suggests that DDL firms share similar pre-treatment trends in Q with firms incorporated elsewhere, while there is a clear post-event trend in value for the firms covered by DDLs after the legislation becomes effective. This is consistent with our main identifying assumption of the DD research design that the ex-ante movements (or pre-trends) in the average Q of the two sets of comparison firms are parallel.

[Internet Appendix Table IA3](#) considers the dynamics of the documented positive relation between DDLs and Q by using the following indicator variables surrounding the effective date of the laws (as in, e.g., [Bertrand and Mullainathan, 2003](#); [Giroud and Mueller, 2010](#); [Atanasov, 2013b](#)). First, we construct a placebo test by falsely assigning affected status to firms incorporated in states with DDLs one or two years before the legislation actually becomes effective and label this placebo dummy as $DDL^{[-2 \text{ or } -1]}$. Second, the dummy $DDL^{[0]}$ indicates the year a DDL actually becomes effective in the firm's state of incorporation. Third, $DDL^{[+1, +2, \text{ and } 3+]}$ is set equal to one if a company is incorporated in a state with a DDL that became effective one, two, and three or more years ago. Substituting these indicator variables for the main independent variable, DDL , we run models analogous to those in columns 1-5 of [Table 2](#).

In all five columns of [Internet Appendix Table IA3](#), the placebo estimators are statistically insignificant (i.e., the coefficients of $DDL^{[-2 \text{ or } -1]}$), whereas the coefficients of $DDL^{[+1, +2, \text{ and } 3+]}$ are always positive and both statistically and economically significant. Overall, this evidence is consistent with the parallel trends assumption, as firms in both DDL and non-DDL states have insignificantly different values prior to the effective date of the laws, whereas the companies incorporated in the enacting states experience increases in value *after* the laws become effective – helping to rule out reverse causality.

Another way to examine the time series dimension of the relation between firm value and stakeholder orientation is to regress changes-in- Q on the first difference of our main explanatory variable, DDL . We measure the change in firm value by subtracting the value of Q at the end of the fiscal year when the DDL first becomes effective in the firm's state of incorporation from the subsequent value of Q one to five years later. Regression estimates from these models are reported in [Internet Appendix Table IA4](#) and confirm that firm value increases for covered firms, showing a gradual increase in the change in Q , as the coefficients on the change in DDL increase in magnitude across the five columns (see point estimates in columns (1) [0.072], (2) [0.078], (4) [0.095], and (5) [0.097]). This progressive increase in firm value over time is also consistent with [Figure 1](#) and [Internet Appendix Table IA3](#).

4.2. Matched sample

In this section, we address the concern that a selection effect (e.g., reincorporation) might bias our finding that DDLs are positively related to Tobin's Q in the main sample. In particular, some

firms may reincorporate or first-time incorporate into (or out of) a DDL state after the law has already become effective. For this subset of firms, the increase (or decrease) in stakeholder orientation and scope in director authority is non-randomly assigned, which could potentially bias our main sample results.

To address this concern, we construct a propensity score-matched sample where we match firms in each of the DDL states in the year before the laws' passage ($t-1$) to firms incorporated in non-DDL states in at least the five-year period following their matched counterparts' adoption year. Our "treated" group (*Treated*) consists of firms incorporated in states that are one-year away from passing a DDL, while their potential matches in non-DDL states form the "control" group of firms. The main idea behind this approach is that by forming matched pairs in the year before treatment, we ensure that our DD estimates are restricted to firms that were incorporated in DDL-states before the laws were passed and that do not reincorporate in any state without a DDL.

Our matching procedure requires that treated and control firms are headquartered in the same U.S. Census division and that they operate in the same Fama-French 49 industry. In addition, we construct propensity scores based on Q , *Size*, $\ln(\text{Age})$, *Loss*, and *IO*, as well as on the following measures of stakeholder orientation (to address any residual selection effect not covered by matching in $t-1$): *Strategic Alliance*, *Supplier Dependency*, *Unsecured Debt*, and $\ln(\text{Patent})$. Panel A of Table 3 reports summary statistics for the 1,038 pairs of treated and control firms in the year before treatment.

Supporting the validity of our matching procedure, we verify that each of the matching variables' means are insignificantly different, suggesting that the groups of treated and control firms have similar observable characteristics. For example, the treated firms average Q is 1.706 (standard deviation = 1.218) in year $t-1$, while the control groups average Q is 1.668 (standard deviation = 1.129), which difference of 0.039 is statistically indifferent (t -statistic=0.75). The two groups by construction have identical *Census Division* and *FF49 Industry*, and are comparable on *Size*, $\ln(\text{Age})$, *Loss*, *IO*, and the four measures of $t-1$ stakeholder orientation: *Strategic Alliance*, *Supplier Dependency*, *Unsecured Debt*, and $\ln(\text{Patent})$.

Panel B of Table 3 presents results of regressing Q on a $Treated \times Post$ interaction term (where we use the $Treated \times Post$ variable convention instead of *DDL* to indicate we are using a matched sample). *Treated* is always equal to one for firms incorporated in a DDL state, and zero otherwise. *Post* is set equal to one in the year of, and the three years after, the enacting states'

adoption date, and zero in the period before. We include firm and industry-by-year fixed effects in all five columns and add division-by-year fixed effects in columns 2-5 and use robust standard errors with state of incorporation-level clustering. The *Treated* and *Post* indicators are excluded due to co-linearity with fixed effects. Columns 3-5 include our firm-level controls, while the last two columns append controls for the other antitakeover laws. Lastly, column 5 includes the headquartering state-level control variables.

In column 1, we find that the treated firms experience economically and statistically significant increases in Q of 3.9 percentage points relative to the matched control firms over a \pm three-year estimation window. This represents a meaningful 2.5% ($=0.039/1.583$) increase in firm value relative to the matched sample average value of Q of 1.583.¹⁶ Consistently, when we estimate the fully specified model in column 5, we document an average increase of 3.2% ($=0.051/1.583$) in Q relative to the control firms. Hence, the economic magnitude of the effect of greater stakeholder orientation on firm value in the matched sample ($3.2\%=0.051/1.583$) is very close to what we found in the main sample ($3.5\%=0.067/1.918$).

4.3. Alternative value measures

Our main measure of value is Q . For robustness, however, we consider several alternative value measures, grouped into three categories. The first category employs stock returns. We use risk-adjusted excess stock returns (similar to the approach in [Cohen and Wang, 2013](#)), which we estimate using the CAPM ([Treynor, 1962](#); [Sharpe, 1964](#); [Lintner, 1965](#); [Mossin, 1966](#)) or Fama-French four factor ([Fama and French, 1993](#); [Carhart, 1997](#)) models (*Mkt. Adj. Excess Ret* and *FF4 Adj. Excess Ret*, respectively). The second category uses Total Tobin's Q (*Total Q*). This measure of firm value, introduced in [Peters and Taylor \(2017\)](#), modifies standard Q by including intangible capital in the denominator term – i.e., the firm's replacement cost of total capital. Our last category consists of the following profitability ratios ([Bertrand and Mullainathan, 2003](#); [Giroud and Mueller, 2010](#)): return on assets (*ROA*), and return on capital employed (*ROCE*). We lead the profitability ratios by one year ($t + 1$) since DDLs likely affect policy variables with a lag.

¹⁶ The average Q in the matched sample is noticeably lower than its average in the main sample. This is an artifact of increasing Q s over time in the U.S., and the majority of DDLs being enacted earlier in the sample period (1984-1990).

We present our results using these alternative measures for firm value in [Table 4](#), where [Panel A \(B\)](#) uses the main (matched) sample. Each of the five columns in both panels includes our full set of controls and fixed effects and adjusts standard errors for clusters at the state of incorporation level. The results in [Table 4](#) indicate that firms incorporated in DDL states experienced significant increases in firm value across all of these different measures – stock returns, Total Tobin’s Q and profitability. For example, we find that firms affected (*Treated*) by DDLs had gains in *FF4 Adj. Excess Ret* and *ROA* of 2.4 (5) and 0.8 (0.9) percentage points, respectively, in the main (matched) sample.¹⁷

As a final robustness check, we follow prior studies ([Gompers et al., 2003](#); [Bebchuk et al., 2009](#); [Giroud and Mueller, 2011](#); [Cremers and Ferrell, 2014](#); [Cremers et al., 2017](#)) and construct long (short) portfolios of stocks from the *Treated* (control) firms in the matched sample around the time their (matched counterparts) DDLs become effective. The idea behind this portfolio approach is to test whether greater stakeholder orientation in corporate decisions via DDLs matters for long-term firm performance, and its effect are incorporated into equity prices over a longer period of time because of, for instance, informational inefficiencies across states and time.¹⁸

[Panel C](#) of [Table 4](#) indicates that long portfolios of treated firms and long-short portfolios of treated and control firms yield positive and significant alphas over “6m12” and “6m24” holding periods, using a value-weighted market factor,¹⁹ and estimating risk-adjusted returns using either the four-factor ([Carhart, 1997](#)) or three-factor ([Fama and French, 1993](#)) models. For instance, when we buy stocks of treated firms six months before the effective date of DDLs and hold such stocks until 24 months after (“6m24”), we find an annualized abnormal return of 7.4%, significant at the 1% level, using the four-factor model. In contrast, shorting control group stocks for a similar investment horizon, does not result in significant abnormal stock returns. Further, the resulting

¹⁷ [Karpoff and Wittry \(2018\)](#) analyze the effect of *BCLs* on *ROA* over the period 1976 to 1995 using models that specify, among other controls, the other antitakeover laws (which includes DDLs) and firm, state-by-year, and SIC3 industry-by-year fixed effects. Most relevant for our study, they find an insignificant coefficient on DDL of 0.002 in the *ROA* regressions. We provide reconciling evidence for this discrepancy in [Internet Appendix Table IA5](#). Namely, as discussed previously, since most DDL-firms are incorporated and headquartered in the same state and because SIC3 industries are far more granular than FF49 industries, the available variation captured by the *DDL* estimator is severely limited in models that include both state-by-year and SIC3 industry-by-year fixed effects (see column 4 of [Table IA5](#)).

¹⁸ Another possible explanation for the differences in realized returns between treated and control firms is that the risk characteristics of the treated firms change with the enactment of an effective DDL. For instance, in the next section we show that DDL-affected firms increase their investments in risky innovative projects ([Panel B, Table 7](#)), which in turn, likely changes the overall risk profile of the treated firms (e.g., see, [Gu, 2016](#)).

¹⁹ Our results are also robust to using an equally-weighted market factor.

long-short portfolio that buys the treated and sells the controls firms has a positive and significant (10% level) annualized abnormal stock return of 6.4%.

Overall, we find robust evidence in *Q*, *Stock Returns*, *Total Q*, and *Profitability* regressions in both our main and matched sample, as well as in our matched sample portfolio analysis, that greater stakeholder orientation via enhanced director discretion (provided by DDLs) increases shareholder value.

5. The bonding effects of stakeholder orientation

We now shift our attention to investigating potential channels through which greater stakeholder orientation in director decision-making may contribute to increased firm value. Specifically, we conjecture that the bonding hypothesis of takeover defenses ([Johnson et al., 2015](#)) could explain our results. Under this hypothesis, increasing director authority is valuable because it enables the firm to commit to business strategies – including business relationships with stakeholders (e.g., employees, customers, suppliers, and alliance partners) – that cannot easily be undone through a takeover (e.g., [Knoeber, 1986](#); [Laffont and Tirole, 1988](#); [Shleifer and Summers, 1988](#); [Stein, 1988, 1989](#)). This commitment reduces the likelihood that firms may act opportunistically, including by altering a business strategy via a takeover, and expropriate the quasi-rents arising from the stakeholders' firm-specific investments (e.g., shared knowledge, joint ventures, long-term contracts, etc.). On this view, DDLs would help firms to credibly commit to stable relationships with their stakeholders, encouraging stakeholders to invest optimally in their relationship with the firm, leading to more favorable contracting terms (with reduced costs of contracting) and, ultimately, improving a firm's long-term value.

To test the bonding hypothesis, we take two approaches. First, we follow previous studies (e.g., [Johnson et al., 2015](#); [Cen et al., 2016](#); [Cremers et al., 2017](#); [Chemmanur and Tian, 2018](#)) and explore the heterogeneous value effects of DDLs for firms more reliant on business strategies that center on firm-specific investments and for which quasi-rents are potentially appropriable. These include firms with greater exposure to nonfinancial and creditor stakeholders, and that are more engaged in innovative activities. Second, we test whether DDL-covered firms alter their operational policies to better protect stakeholders and focus more on longer-term investment projects.

5.1. Non-financial stakeholders

Panel A of Table 5 tests whether DDL firms with more exposure to non-financial stakeholders experience heterogeneous gains in value. We use four measures to categorize firms where investments by non-financial stakeholders are likely to matter more. The first variable, *Labor Intensity*, measures how intensely businesses rely on their human capital and is estimated as the number of employees divided by real sales revenue (Dewenter and Malatesta, 2001), where we adjust sales using inflation-adjusted 2015 dollars. The second is *Large Customer*, which is an indicator variable set equal to one if a firm's percentage of customer sales, based on the Compustat Segments database, is above the sample average, and zero otherwise. The third is *Supplier Dependency*, which captures the dependency of a company on its suppliers and is defined as the product of the supplier's R&D expenditure and the fraction of sales to the customer, scaled by the supplier's book value of assets (following Kale and Shahrur, 2007; Raman and Shahrur, 2008; and Phua et al., 2018). The fourth measure, *Strategic Alliance*, is constructed to indicate whether a firm has a long-term partnership with another firm (following Bodnaruk et al., 2013). We create this variable by setting it equal to one in all firm-years in which the firm participates in an active strategic alliance, and otherwise setting it to zero (Johnson et al., 2015).

In each of models 1-4, we include our full set of controls and fixed effects and estimate robust standard errors with clustering by state of incorporation. The results are consistent with the bonding hypothesis. For example, column 1 shows that firms incorporated in states with a DDL and with a one standard deviation increase in *Labor Intensity* experience an additional increase in *Q* of 1.4% ($=0.046 \times 0.313$), and column 4 documents that DDL firms in a *Strategic Alliance* experience a heterogeneous increase in *Q* of 7.8% ($=0.150/1.918$) relative to the unconditional sample average.

Next, we consider how DDLs affect non-financial stakeholder policies. Ideally, we would test outcomes for all non-financial stakeholder groups, but given data limitations we focus exclusively on employees. Following a similar approach as Autor et al. (2007) and Serfling (2016), we regress the absolute value (abs) of changes (Δ) in either employee levels or wage outcomes on the interaction of *DDL* with the absolute value of changes in firms' profitability. The idea behind these tests is that greater stakeholder orientation in director decision-making should increase the relative stability (i.e., job security) and decrease employment fluctuations in firms incorporated in DDL states. Panel B of Table 5 presents the results. All continuous dependent and independent variables are standardized to have unit variance to ease interpretation of the point estimates.

Column 1 shows the results of regressing $\text{abs}(\Delta \text{Employee})$, where $\Delta \text{Employee}$ equals the one-year percentage change in a firm's number of employees, on DDL and its interaction with $\text{abs}(\Delta \text{Profitability})$, where $\Delta \text{Profitability}$ measures the one-year change in a firm's overall profitability. This first column shows that DDLs on average decrease the sensitivity of net employment changes (by $17.5\% = 0.031/0.177$), especially when the firm is experiencing fluctuations in net cash flows. The positive coefficient of 0.023 on $\text{abs}(\Delta \text{Profitability})$ suggests that if the absolute value of profitability changes by one standard deviation, firms alter 0.023 of a standard deviation of their employee work force.

The negative coefficient of -0.023 on $\text{DDL} \times \text{abs}(\Delta \text{Profitability})$ indicates DDLs offset this sensitivity completely ($100\% = 0.023/0.023$). Columns 2 and 3 consider the sensitivity of current ($\text{abs}(\Delta \text{SG\&A})$) and former ($\text{abs}(\Delta \text{P\&R})$) employee wage-related expenses to changes in DDL-firms' profitability. Here *SG&A* denotes selling, general, and administrative expenses and *P&R* represents pension and retirement benefits. Both columns show that DDLs do not change these outcomes in general but do reduce the sensitivity of wage-related flows to firm-specific changes in profitability (with coefficients of -0.014 and -0.02, respectively).

We conclude that, consistent with the bonding hypothesis, employees of stakeholder-oriented firms have more job security (i.e., less employment fluctuation) as the firm commits to the employee relationship, helping to solve both a potential holdout situation and underinvestment by employees (see, e.g., [Acharya et al., 2014](#)), which is valuable for shareholders.

5.2. Creditors

This section focuses on creditors, who may be subject to the risk of wealth expropriation when directors are mandated to exclusively maximize shareholder wealth, due to the well-known asset substitution problem ([Smith and Warner, 1979](#)). Along similar lines, creditor interests are threatened by a potential change in control, due to the leverage restructuring plans that typically accompany takeovers and related claim dilution issues ([Smith and Warner, 1979](#)).

[Panel A](#) of [Table 6](#) investigates the heterogenous effects on creditors by interacting DDLs with four measures of firms' ability to appropriate creditors' quasi-rents. These variables are: *Unsecured Debt*, the ratio of unsecured debt to total debt ([Valta, 2016](#)); *Industry CF Risk*, the standard deviation of operating cash flows for a three-digit SIC code industry over seven-year rolling windows ([Serfling, 2016](#)); *Creditor Reliance*, an indicator variable for the reliance of a

firm on creditors, set equal to one for a firm with a debt-to-equity ratio greater than the sample year median, and zero otherwise; *Default Risk*, a dummy equal to one if a firm has a modified Z'' -score below the sample-year median, and zero otherwise (Altman et al., 1977; MacKie-Mason, 1990).

All specifications in this panel include the full set of controls and fixed effects. Providing further evidence for the bonding hypothesis, column 1, for example, shows that affected firms with greater levels of unsecured debt experience larger increases in value after DDL adoptions. In particular, a one standard deviation increase in *Unsecured Debt* yields a positive increase in Q of 1.9% ($=0.046 \times 0.405$) for corporations covered by a DDL. Columns 2-4 provide similar evidence. For instance, column 4 shows that DDL-firms experiencing a one standard deviation increase in *Default Risk* (i.e., a situation where creditors might be especially at risk of expropriation) lose less value (coefficient=0.064 and t -statistic=1.87) than Census division rivals incorporated in states without such laws that permit directors to consider creditors (coefficient=-0.187 and t -statistic=-8.19).

In Panel B of Table 6, we shift to assessing the effect of DDLs on creditor outcomes using the overall financial soundness of firms incorporated in states with these laws. Guided by recent theoretical work (Allen et al., 2015), we conjecture that firms that are more oriented toward considering stakeholders in their directors' decisions might take more precaution in their policies to avoid bankruptcy. We measure financial soundness using three dependent variables. The first is an indicator variable equal to one if a company has negative net income in a given year (*Loss*), and zero otherwise (Cain et al., 2017). The second is *Default Risk*, defined as above. Lastly, we use *Short-Term Debt* defined as the percentage of short-term debt to total debt (Bowen et al., 1995).

The three columns in Panel B of Table 6 show regression results for the three different financial soundness-related dependent variables, controlling for the baseline covariates and firm, division-by-year, and industry-by-year fixed effects. Similar to the employee measures, we consider the impact of DDLs on next year's financial soundness ($t + 1$) since the laws likely affect these accounting variables with a lag. We document evidence consistent with the bonding hypothesis, the theoretical predictions in Allen et al. (2015), and empirical findings in Gao et al. (2019), as all three measures for financial soundness improve for the DDL-covered firms compared to the uncovered firms. For instance, column 1 suggests that corporations covered by a DDL, and thus

subject to greater stakeholder orientation, are 1.9% less likely to have negative net income in the next fiscal year.

5.3. Innovative firms

Since innovation often requires more significant firm-specific investments from stakeholders (Acharya et al., 2014; Cremers et al., 2017; Chemmanur and Tian, 2018), greater director authority to resist a takeover bid through a DDL could also prove useful in preventing the ex-post expropriation of these investments and hence more credibly commit innovative firms toward its non-shareholder constituencies.

Panel A of Table 7 tests the bonding hypothesis mechanism for innovative firms using the following four empirical measures for the importance of innovation. The first measure is *R&D/Sales* (Chan et al., 2001; Eberhart et al., 2004). Second, we create the variable *Investment Rate* as the sum of capital expenditures and acquisitions minus the sale of property and divided by the book value of assets (Sanati, 2018). The third measure for long-term investments is innovation that results in patent citation as defined by the natural logarithm of one plus citation-weighted patents ($\ln(CW Patent)$) (Hall et al., 2005; Atanasov, 2013b). The last variable is research quotient (*RQ*) (as proposed in Knott, 2008), which measures the output elasticity of R&D and is provided on WRDS in the Research Quotient database.

The results in Panel A of Table 7 are consistent with the bonding hypothesis, and indicate that firms that are more engaged in long-term innovation and, hence, require greater firm-specific investments from stakeholders, increase more in value after a DDL is adopted. For instance, in column 1, we find that the adoption of a DDL for a firm with a one standard deviation higher *R&D/Sales* is associated with an incremental increase in *Q* (relative to the sample mean) of 3.9% ($=0.872 \times 0.086 / 1.918$). Similar results are found in columns 2-4. For example, column 3 examines the effect of DDLs on firms reliant on novel innovation and shows that affected companies with citation-weighted patent portfolios in the 75th percentile of the sample distribution experience heterogeneous increases in value of 3% ($=0.029 \times 1.029$).

Panel B of Table 7 considers the effect of DDLs on innovation inputs (*R&D/Sales*) and outputs ($\ln(CW Patent)$ and $\ln(SM Patent)$), where $\ln(SM Patent)$ is defined as the natural logarithm of one plus the stock market-value of patents (as in Kogan et al., 2017; and Kempf and Spalt, 2019). The patent data comes from the KPSS database and covers all utility patents issued

by the United States Patent Office (USPTO) from 1926 to 2010. Since DDLs likely affect these accounting measures with a lag, we lead the dependent variables by one year ($t + 1$).

Panel B of Table 7 presents the estimates from regressing these innovation-related dependent variables on *DDL*, including our full set of controls and firm, division-by-year, and industry-by-year fixed effects. Columns 1-3 document positive and statistically significant increases in all innovation measures, as captured by research and development expenditures, citation-weighted patents (consistent with Atanassov, 2013a and Flammer and Kacperczyk, 2015), and stock market-weighted patents. For instance, in column 1, we find that after a firm is covered by a DDL, next year's *R&D/Sales* increases by 6.3% ($=0.003/0.048$) relative to the sample mean.

Overall, the results across Tables 5-7 suggest that enhanced stakeholder orientation in director decision-making is especially valuable for firms where the bonding hypothesis is more likely to be relevant. The interpretation of these results under this hypothesis is that firms that are more labor-intensive, have a large customer, are dependent on a supplier or in a strategic alliance, are more exposed to creditors, and where long-term investments are more important are better able to commit to long-term operational strategies and business relationships via DDLs, which reduces hold up and underinvestment problems and benefit all stakeholders, including shareholders.

5.4. Abusing enhanced discretion

Agency theory holds that enhanced management discretion may create a risk that opportunistic managers abuse such discretion to ex-post rationalize any self-interested action as benefitting constituencies other than the shareholders (e.g., Jensen, 1986; Tirole, 2001; Bertrand and Mullainathan, 2003; Pagano and Volpin, 2005). This, in turn, raises the question of whether the benefits of DDL-enhanced management discretion might be less pronounced, or even fully dissipate, in firms that are more likely to be characterized by severe agency problems. To address this question, we investigate the effect of DDLs on firms presenting features that are likely to be associated with large agency problems.

Specifically, we consider the following five variables to categorize firms' exposure to potential abuses of enhanced discretion: *Long Tenured CEO*, used to measure CEO power (Morse et al., 2011), is an indicator variable set equal to one if a firm's CEO tenure lies in the top tercile of its sample-year empirical distribution, and zero otherwise (data from ExecuComp); *Strong Union* considers the power of unions to influence director decision-making (Matsusaka et al., 2019) and

is measured as an indicator variable equal to one if a firm is headquartered in a state where its sample-year percentage of *Union Membership* lies in the top tercile of its empirical distribution and zero otherwise (data from the Current Population Survey and the Directory of National Unions and Employee Associations); *Low AU* is a measure of a firm's agency costs based on its asset utilization (*AU*) (Ang et al., 2000; Singh and Davidson, 2003), and is constructed as an indicator equaling one for firms with *AU* that lies in the bottom tercile of its sample-year empirical distribution, and zero otherwise (where *AU* is defined as sales divided by total assets); *Excessive OE* is another efficiency based measure of a firm's agency costs (Prowse, 1990; Ang et al., 2000), and is an indicator set to one if a firm's operating expenses (*OE*) lie in the top tercile of its sample-year empirical distribution, and zero otherwise (where *OE* equals a firm's cost of goods sold plus selling, general, and administrative expenses all divided by total sales); and *High FCF* measures the extent of a firm's agency problems' associated with its corporate free cash-flow (Jensen, 1986; Faleye, 2005) and is an indicator equal to one for firms with sample-year levels of free cash-flows (*FCF*) that lie in the top tercile of its empirical distribution and zero otherwise (where *FCF* is estimated as operating activities/net cash flow minus capital expenditures all divided by total assets). The last three measures of the severity of agency problems use data from Compustat.

Table 8 presents the findings. Columns 1-5 specify the full set of controls and fixed effects and correct standard errors for clustering at the state of incorporation level. In line with our conjecture that expanded management discretion can be detrimental for firms that are more likely to abuse this discretion (e.g., Jensen, 1986; Tirole, 2001; Bertrand and Mullainathan, 2003; Pagano and Volpin, 2005), we find a negative and significant coefficient on the interaction of DDL with the measures of *Agency Costs* in each of the five columns of Table 8. For instance, Column 1 shows that DDL firms with CEOs that are among the longest tenured in the sample have less pronounced gains from enhanced discretion (point estimate = -0.152 and *t*-statistic = -3.17). In fact, when we test the joint significance of the standalone *DDL* coefficient (= 0.127) with its interacted *Long Tenured CEO* estimate (= -0.152), we find that the entirety of the benefit firms receive from greater stakeholder orientation dissipates (joint estimate = -0.024 and *t*-statistic = -0.30). The same holds for each (most) of the columns in Table 8 as the statistically (economically) significant positive impact of DDLs tend to reduce, if not dissipate, for firms with more severe agency problems.

These results confirm a heterogeneous effects of enhanced director discretion via the enactment of DDLs. More particularly, they indicate a tradeoff between, on the one hand, increased shareholder ability to commit to more stable stakeholder relationships and longer-term investments, and, on the other hand, potential abuses of enhanced director discretion. Under this tradeoff (and as documented in [Tables 5, 6 and 7](#)), firms that are likely to benefit more from increased stakeholder commitment (i.e., firms that are more labor-intensive, have a large customer, are dependent on a supplier or in a strategic alliance, are more exposed to creditors, and where long-term investments are more important) experience gains from the passage of DDLs. At the same time (as shown in [Table 8](#)), such benefits reduce or even dissipate in firms that are subject to more severe agency problems (i.e., firms with longer CEO tenure, stronger union influence on management, underutilized assets, higher operating expenses or more free cash-flows).

6. Additional investigations

We include several additional robustness tests in the [Internet Appendix \(Tables IA6-IA12\)](#). As a roadmap, we include here a brief outline of our robustness results:

- (i) We verify the strength of our main finding to the inclusion of state-by-year fixed effects instead of division-by-year fixed effects ([Panel A, Table IA6](#)), showing that our results hold using this alternative specification. Additionally, we show that our matched sample findings are also robust to using a sample constructed by matching exactly on states of headquarters instead of U.S. Census divisions ([Panel B, Table IA6](#)).
- (ii) We verify that our results continue to hold when we adjust the sample period to 1993-2015 ([Table IA7](#)). The reason for this adjustment is to ensure that the findings are not confounded by the corporate raiders' era in the mid-to-late 1980s nor the 1992 recession.
- (iii) Following [Cornaggia et al. \(2015\)](#), we perform a placebo test on the main sample by randomly assigning states (without replacement) a DDL ([Panel A, Table IA8](#)). In this assignment procedure, we adhere to the laws' actual empirical distribution. We do not find a significant impact of *Randomized DDL* on firm value ([Panel B, Table IA8](#)). Additionally, we examine the statistical reliability of our main sample's empirical design by conducting tests for "size" and "power" on 1,000 bootstrapped samples.

- Table IA9 indicates that our main sample models exhibit good size (Panels A and B) and power (Panel C).²⁰
- (iv) We check the validity of our matched sample regression estimates by performing a placebo test, whereby we purposely move back DDL adoption dates by four years, and construct a new placebo matched sample ($t-1$ summary stats in Panel C, Table IA8); hence, an increase in stakeholder orientation (via DDLs) never actually occurs. Panel D of Table IA8 shows placebo-treated and control firms have insignificantly different Q s over the entire ($t \pm 3$) estimation window, further lending support for the parallel trends assumption in our “true” matched sample.
 - (v) We explore three legal robustness tests:
 - a. the possibility that a negative “Delaware effect” is driving our results since the majority of unaffected (control) firms in our main (matched) sample incorporate in Delaware. However, Table IA10 demonstrates that excluding these firms entirely from either the main sample or when constructing a matched sample does not affect our results.
 - b. the heterogeneous strength of DDLs by forming a directors’ duties strength index (*DDS-Index*) (outlined in Panel A, Table IA11) – which considers, among other things, the different strengths of DDLs in the nine states in which these laws only apply in the takeover context – and verifying that our main findings hold using this alternative measure of stakeholder orientation (Panel B, Table IA11).
 - c. the heterogeneity in Texas’ DDL, since this law permitted firms incorporated in Texas before its DDL’s effective date (1/2006) to voluntarily opt-in until 1/2010. Panel C of Table IA11 finds that our main results are robust to various approaches (*DDL-Texas Adj.* and *DDL-Texas Index*) for Texas’ incorporated firms.
 - (vi) Lastly, as an alternative channel through which greater stakeholder orientation via DDLs may contribute to increased firm value, we test the “bargaining power” hypothesis (DeAngelo and Rice, 1983; Stulz, 1988; Harris, 1990; Kadyrzhanova and

²⁰ Heath et al. (2019) shows that repeated use of the BCL quasi-natural experiment significantly increases the likelihood of false discoveries. Spamann (2019) employs randomly assigned “Placebo” laws and finds that conventional statistical tests based on these standard errors (clustered at the state of incorporation level) over reject. Our bootstrapped analysis that randomly assigns DDLs in lockstep with their actual empirical distribution helps exclude that our findings suffer from these statistical issues.

[Rhodes-Kropf, 2011](#)). Under this different hypothesis, DDLs might enable a target's directors to obtain a higher purchasing price by providing them with more flexibility on whether or not to accept a takeover bid based on the consideration of stakeholder interests, which in-turn would be valuable for the firm's shareholders. In particular, we test this alternative channel of value by analyzing both takeover likelihoods and target acquisition premiums (e.g., [Bates et al., 2008](#)). Our results, however, reject the bargaining power hypothesis, indicating that firms incorporated in states with effective DDLs are equally likely to receive a takeover bid or be acquired as companies in states without these laws ([Panel A, Table IA12](#)), and further indicating that DDL-affected firms do not experience increases in takeover premia ([Panel B, Table IA12](#)).²¹

7. Conclusion

Our main finding is that the passage of directors' duties laws (DDLs) results in a statistically and economically significant increase in firm value. This finding is robust to various methodologies, including first difference regressions, interchanging our baseline U.S. Census division-by-year fixed effects-model with state-by-year fixed effects, the incorporation of possible selection effects (such as reincorporation) through the creation of a matched sample, and alternative value measures, such as stock returns and profitability ratios. The effect of DDLs on Tobin's Q is more pronounced for firms where stakeholder investments are likely to be more relevant (e.g., employee- or creditor-intensive firms, firms with a large customer, or in a strategic alliance) or firms that are more innovative. We also show that, after these laws are passed, employees gain in job security, financial soundness improves, and investments in innovation increase.

Overall, our results support the view that stakeholder orientation promotes long-term value creation for many firms by fortifying their operational strategy and reducing their contracting costs with stakeholders (the "bonding hypothesis"). Nevertheless, these benefits tend to be offset in firms with more severe agency problems, where it is more likely that enhanced director discretion might be abused in the exclusive interest of management, pointing to a heterogenous effect of

²¹ There are two key challenges in empirically testing the bargaining power hypothesis. First, we are unable to measure how many takeover bids and would-be-successful attempts never materialized because of the introduction of DDLs. Second, we do not observe how many ex-ante targets became too costly following the enactment of a DDL as we demonstrate that the affected firms' market values significantly increased afterwards, making them more expensive (and thus difficult) to acquire (e.g., [Edmans et al., 2012](#)). Nevertheless, the available evidence rejects this explanation.

stakeholder orientation in corporate decision-making and supporting the view that one size-does-not fit all in corporate governance.

Appendix

Table A1
Variable definitions.

This table provides the definition and data source for all variables.

Variable	Definition
<i>abs(Δ Employee)</i>	The absolute value of the one-year percentage change (Δ) in a firm's number of employees; Compustat.
<i>abs(Δ P&R)</i>	The absolute value of the one-year percentage change (Δ) in a firm's pension and retirement expenses; Compustat.
<i>abs(Δ Profitability)</i>	The absolute value of the one-year change (Δ) in a firm's profitability, where profitability equals income before extraordinary items plus depreciation and amortization divided by total assets; Compustat.
<i>abs(Δ SG&A)</i>	The absolute value of the one-year percentage change (Δ) in a firm's selling, general, and administrative expenses; Compustat.
<i>BCL</i>	An indicator variable equal to one if a firm is incorporated in a state that has an effective business combination law, and zero otherwise. The effective (and adoption) dates come from Cain et al. (2017) and Karpoff and Wittry (2018) .
<i>CAPX/Assets</i>	Capital expenditures divided by the value of total book assets; Compustat.
<i>Creditor Reliance</i>	An indicator variable equal to one for a firm with a debt-to-equity ratio greater than the sample-year median, and equal to zero otherwise; Compustat.
<i>CSL</i>	An indicator variable equal to one if a firm is incorporated in a state that has an effective control share law, and zero otherwise. The effective (and adoption) dates come from Cain et al. (2017) and Karpoff and Wittry (2018) .
<i>DDL</i>	An indicator variable equal to one if a firm is incorporated in a state with an effective directors' duties laws (or constituency statute), and zero otherwise. The effective dates come from Barzuza (2009) and Karpoff and Wittry (2018) .
<i>Debt</i>	Long-term debt divided by book equity, where book equity is calculated as in Fama and French (1992) ; Compustat.
<i>Default Risk</i>	An indicator variable equal to one if a firm has a modified Z'' score below the sample-year median. Modified Z'' score is a measure to indicate the likelihood of a company going bankrupt or having significant financial distress defined as $3.25 + 6.56*(wcap/at) + (3.26*re/at) + (6.72*ebit/at)$. Z'' is more suitable for evaluating the financial health of firms in different industries, while the original measure, Z , was created solely for manufacturing firms (Altman et al., 1977). <i>Modified</i> characterizes the exclusion of the last term (<i>beq/lt</i>) in the original Z'' measure (MacKie-Mason, 1990); Compustat.
<i>Excessive OE</i>	An indicator variable equal to one if a firm's operating expenses (<i>OE</i>) lie in the top tercile of the sample-year empirical distribution, and zero otherwise. <i>OE</i> is defined as the ratio of a firm's cost of goods sold plus its selling, general, and administrative expenses over its total sales; Compustat.

<i>FF4 Adj. Excess Ret</i>	Fama-French 4-factor adjusted excess returns are defined as the residual from annual regressions of raw returns on a value-weighted market factor, a small-minus-big factor, high-minus-low factor and a momentum factor; CRSP and Ken French's website.
<i>FLIQ</i>	Firm liquidity, measured as current assets minus current liabilities divided by the value of total book assets; Compustat.
<i>FPL</i>	An indicator variable equal to one if a firm is incorporated in a state that has an effective fair price law, and zero otherwise. The effective (and adoption) dates come from Cain et al. (2017) and Karpoff and Wittry (2018) .
<i>GDP Growth</i>	The incorporated state-level GDP growth rate over the fiscal year; U.S. Bureau of Economic Analysis.
<i>HHI</i>	The Herfindahl-Hirschman Index for a particular industry. Defined as the sum of squared market shares for all firms in a three-digit SIC industry. The market share of firm i is defined as the value of sales of firm i divided by the total value of sales in the industry of firm i ; Compustat.
<i>High FCF</i>	An indicator variable equal to one if a firm's free cash flows (FCF) lie in the top tercile of the sample-year empirical distribution, and zero otherwise. FCF is defined as operating activities/net cash flow minus capital expenditures divided by total assets; Compustat.
<i>Hostile M&A Intensity</i>	The number of unsolicited and hostile bids received by firms in a specific state, in a given year, divided by the total number of unsolicited and hostile bids in that same year; SDC M&A.
<i>IDD</i>	An indicator variable equal to one if a firm is headquartered in a state that recognizes the inevitable disclosure doctrine, and zero otherwise. The court recognition (and rejection) dates come from Klasa et al. (2018) .
<i>Inc. ΔSY (Q; $Return$; ROA)</i>	The one-year change (Δ) in the median [Q ; raw stock $Return$; ROA] of all firms incorporated within a state, in a given year; Compustat.
<i>Inc. SY (Q; $Return$; ROA)</i>	The median [Q ; raw stock $Return$; ROA] of all firms incorporated within a state, in a given year; Compustat.
<i>Ind. CF Risk</i>	The operating cash flow volatility for a three-digit SIC code industry, where cash flow volatility is the standard deviation of ROA over a 7-year rolling window; Compustat.
<i>Investment Rate</i>	Capital expenditures plus acquisitions minus the sale of property, over the book value of assets; Compustat.
<i>IO</i>	The percent ownership of a firm by its institutional owners, measured by their equity ownership in their 13F holdings, weighted by the firm's market capitalization; Thomson Reuters.
<i>Labor Intensity</i>	Number of employees divided by real sales, where sales are adjusted using 2015 dollars; Compustat.
<i>Large Customer</i>	An indicator variable equal to one if a firm's percentage of customer sales is greater than the sample-year average; Compustat Segment.
<i>$\ln(1 + CW Patent)$</i>	The natural logarithm of one plus the citation-weighted value of a firm's patents; Noah Stoffman's website.
<i>$\ln(1 + Patent)$</i>	The natural logarithm of one plus the total number of patents granted to a firm in a given year; Noah Stoffman's website.
<i>$\ln(1 + SM Patent)$</i>	The natural logarithm of one plus the stock market-value of a firm's patents; Noah Stoffman's website.

<i>Ln(Age)</i>	The natural logarithm of one plus the number of firm-year observations since the firm's first appearance in Compustat.
<i>Ln(GDPPC)</i>	The natural logarithm of an incorporating state's GDP (in thousands) divided by its total population (PC – per capita); U.S. Bureau of Economic Analysis.
<i>Ln(Population)</i>	The natural logarithm of an incorporating state's total population; U.S. Census Bureau.
<i>Long Tenured CEO</i>	An indicator variable equal to one if a firm's CEO's tenure lies in the top tercile of the sample-year empirical distribution, and zero otherwise; ExecuComp.
<i>Loss</i>	An indicator variable set to one if a firm has negative net income during a fiscal year, and zero otherwise; Compustat.
<i>Low AU</i>	An indicator variable equal to one if a firm has an asset utilization (<i>AU</i>) ratio that lies in the bottom tercile of the sample-year empirical distribution, and zero otherwise. <i>AU</i> is defined as the value of a firm's sales divided by its total book value of assets; Compustat.
<i>M&A Deal Size</i>	The transaction value of all completed deals in a specific state, in a given year, divided by the total transaction value of all completed deals in that same year; SDC M&A.
<i>M&A Intensity</i>	The number of acquisition bids received by firms in a specific state, in a given year, divided by the total number of acquisition bids in that same year; SDC M&A.
<i>Mkt. Adj. Excess Ret</i>	Market adjusted excess returns are defined as the residual from annual regressions of raw returns on a value-weighted market factor; CRSP and Ken French's website.
<i>Political Rep</i>	The proportion of incorporated state-level representatives in the U.S. House of Representatives whom belong to the Democratic Party, in a given year; U.S. House of Representatives website.
<i>PPL</i>	An indicator variable equal to one if a firm is incorporated in a state that has an effective poison pill law, and zero otherwise. The effective (and adoption) dates come from Cain et al. (2017) and Karpoff and Wittry (2018) .
<i>Q</i>	Market value of assets divided by the book value of assets. Book equity and this measure, in general, follows Fama and French (1992); Compustat.
<i>R&D Credit</i>	An indicator variable equal to one if a firm is headquartered in a state that passes R&D tax credits, and zero otherwise. The adoption dates come from Daniel Wilson's website - (Wilson, 2009).
<i>R&D/Sales</i>	Research and development expense divided by the value of sales; Compustat.
<i>ROA</i>	Return on assets, measured as net income scaled by the total book value of assets; Compustat.
<i>ROCE</i>	Return on capital employed, defined as earnings before interest and taxes over the sum of debt in long-term and current liabilities and common equity; Compustat.
<i>RQ</i>	Firm-specific output elasticity of R&D, representing the percentage change in revenues for a 1% change in R&D, as proposed by Knott (2008) ; WRDS Research Quotient.
<i>SG</i>	The natural logarithm of the value of sales in year <i>t</i> divided by the value of sales in year <i>t-1</i> ; Compustat.
<i>Size</i>	The natural logarithm of the value of total book assets in millions, where assets are adjusted using 2015 dollars; Compustat.
<i>ST Debt</i>	Short-term debt divided by total debt; Compustat.

<i>Strategic Alliance</i>	An indicator variable equal to one if the firm is in an active strategic alliance. We only include strategic alliances with at least three partners; SDC Strategic Alliances.
<i>Strong Union</i>	An indicator variable equal to one if a firm is headquartered in a state with an above sample-year median percentage of <i>Union Membership</i> ; Current Population Survey and the Directory of National Unions and Employee Associations.
<i>Supplier Dependency</i>	Relationship specific investment (<i>RSI</i>). <i>RSI</i> equals the product of the supplier's R&D expenditure and the fraction of sales to the customer, divided by total assets of the supplier; Compustat Segment.
<i>Total Q</i>	The market value of outstanding equity plus the book value of debt minus the firm's current assets divided by the sum of physical and intangible capital. Intangible capital is defined as the sum of externally purchased and internally created intangible capital (knowledge plus organizational capital), proposed by Peters and Taylor (2017) ; WRDS Peters and Taylor Total Q.
<i>Unemployment Rate</i>	The unemployment rate in a firm's state of incorporation in a given year; U.S. Bureau of Labor Statistics.
<i>Union Coverage</i>	The percentage of nonagricultural wage and salary workers covered by a collective bargaining agreement; Current Population Survey and the Directory of National Unions and Employee Associations.
<i>Union Membership</i>	The percentage of nonagricultural wage and salary employees who are union members, including employees in the public sector; Current Population Survey and the Directory of National Unions and Employee Associations.
<i>Unsecured Debt</i>	The ratio of unsecured debt to total debt, where unsecured debt equals total debt minus secured debt; Compustat.
<i>WDL</i>	A count variable, where the variable increases by one for every wrongful discharge law a firm's state of headquarters has adopted, and zero if no such laws have been passed. The three types of wrongful discharge laws include: the good faith exception, the implied contract exception, and the public policy exception. Adoption dates come from Autor et al. (2006) and Serfling (2016) .

References

- Abel, A.B., 2018. The effects of q and cash flow on investment in the presence of measurement error. *Journal of Financial Economics* 128, 363–377.
- Acharya, V.V., Baghai, R.P., Subramanian, K.V., 2014. Wrongful discharge laws and innovation. *Review of Financial Studies* 27, 301–346.
- Alexander, J.C., Spivey, M.F., Marr, M.W., 1997. Nonshareholder constituency statutes and shareholder wealth: A note. *Journal of Banking and Finance* 21, 417–432.
- Allen, F., Carletti, E., Marquez, R., 2015. Stakeholder governance, competition, and firm value. *Review of Finance* 19, 1315–1346.
- Altman, E.I., Haldeman, R.G., Narayanan, P., 1977. ZETA analysis a new model to identify bankruptcy risk of corporations. *Journal of Banking and Finance* 1, 29–54.

- Ang, J.S., Cole, R.A., Lin, J.W., 2000. Agency costs and ownership structure. *Journal of Finance* 55, 81–106.
- Angrist, J.D., Pischke, J-S, 2009. *Mostly Harmless Econometrics: An Empiricist's Companion*, 1st ed. Princeton University Press, Princeton, New Jersey.
- Atanasov, J., 2013a. Corporate governance, non-financial stakeholders, and innovation: Evidence from a natural experiment. Unpublished working paper. University of Nebraska.
- Atanasov, J., 2013b. Do hostile takeovers stifle innovation? Evidence from antitakeover legislation and corporate patenting. *Journal of Finance* 68, 1097–1131.
- Autor, D.H., Donohue III, J.J., Schwab, S.J., 2006. The costs of wrongful-discharge laws. *Review of Economics and Statistics* 88, 211–231.
- Autor, D.H., Kerr, W.R., Kugler, A.D., 2007. Does employment protection reduce productivity? Evidence from US states. *Economic Journal* 117, F189–F217.
- Bainbridge, S.M., 1992. Interpreting nonshareholder constituency statutes. *Pepperdine Law Review* 19, 971–1026.
- Bartlett, R.P., Partnoy, F., 2018. The misuse of Tobin's Q. Unpublished working paper. University of California at Berkeley.
- Barzuza, M., 2009. The state of state antitakeover law. *Virginia Law Review* 95, 1973–2052.
- Bates, T.W., Becher, D.A., Lemmon, M.L., 2008. Board classification and managerial entrenchment: Evidence from the market for corporate control. *Journal of Financial Economics* 87, 656–677.
- Bebchuk, L., Cohen, A., Ferrell, A., 2009. What matters in corporate governance?. *Review of Financial Studies* 22, 783–827.
- Berle Jr., A.A., 1931. Corporate powers as powers in trust. *Harvard Law Review* 44, 1049–1074.
- Berle Jr., A.A., 1932. For whom corporate managers are trustees: A note. *Harvard Law Review* 45, 1365–1372.
- Bertrand, M., Mullainathan, S., 1999. Is there discretion in wage setting? A test using takeover legislation. *RAND Journal of Economics* 30, 535–554.
- Bertrand, M., Mullainathan, S., 2003. Enjoying the quiet life? Corporate governance and managerial preferences. *Journal of Political Economy* 111, 1043–1075.
- Bodnaruk, A., Massa, M., Simonov, A., 2013. Alliances and corporate governance. *Journal of Financial Economics* 107, 671–693.
- Bowen, R.M., DuCharme, L., Shores, D., 1995. Stakeholders' implicit claims and accounting method choice. *Journal of Accounting and Economics* 20, 255–295.
- Bratton, W.W., 1989. The 'nexus of contracts' corporation: A critical appraisal. *Cornell Law Review* 74, 407–465.

Bratton, W.W., 1993. Confronting the ethical case against the ethical case for constituency rights. *Washington and Lee Law Review* 50, 1449–1475.

Cain, M.D., McKeon, S.B., Solomon, S.D., 2017. Do takeover laws matter? Evidence from five decades of hostile takeovers. *Journal of Financial Economics* 124, 464–485.

Carhart, M.M., 1997. On persistence in mutual fund performance. *Journal of Finance* 52, 57–82.

Cen, L., Dasgupta, S., Sen, R., 2016. Discipline or disruption? Stakeholder relationships and the effect of takeover threat. *Management Science* 62, 2820–2841.

Chan, L.K.C., Lakonishok, J., Sougiannis, T., 2001. The stock market valuation of research and development expenditures. *Journal of Finance* 56, 2431–2456.

Chemmanur, T.J., Tian, X., 2018. Do antitakeover provisions spur corporate innovation? A regression discontinuity analysis. *Journal of Financial and Quantitative Analysis* 53, 1163–1194.

Cohen, A., Wang, C.C.Y., 2013. How do staggered boards affect shareholder value? Evidence from a natural experiment. *Journal of Financial Economics* 110, 627–641.

Cornaggia, J., Mao, Y., Tian, X., Wolfe, B., 2015. Does banking competition affect innovation?. *Journal of Financial Economics* 115, 189–209.

Cremers, K.J.M., Ferrell, A., 2014. Thirty years of shareholder rights and firm value. *Journal of Finance* 69, 1167–1196.

Cremers, K.J.M., Litov, L.P., Sepe, S.M., 2017. Staggered boards and long-term firm value, revisited. *Journal of Financial Economics* 126, 422–444.

Cuñat, V., Gine, M., Guadalupe, M., 2012. The vote is cast: The effect of corporate governance on shareholder value. *Journal of Finance* 67, 1943–1977.

Daines, R., 2001. Does Delaware law improve firm value?. *Journal of Financial Economics* 62, 525–558.

DeAngelo, H., Rice, E.M., 1983. Antitakeover charter amendments and stockholder wealth. *Journal of Financial Economics* 11, 329–359.

Demsetz, H., Lehn, K., 1985. The structure of corporate ownership: Causes and consequences. *Journal of Political Economy* 93, 1155–1177.

Dewenter, K.L., Malatesta, P.H., 2001. State-owned and privately owned firms: An empirical analysis of profitability, leverage, and labor intensity. *American Economic Review* 91, 320–334.

Dodd Jr., E.M., 1932. For whom are corporate managers trustees. *Harvard Law Review* 45, 1145–1163.

Duchin, R., Schmidt, B., 2013. Riding the merger wave: Uncertainty, reduced monitoring, and bad acquisitions. *Journal of Financial Economics* 107, 69–88.

Easterbrook, F.H., Fischel, D.R., 1983. Voting in corporate law. *Journal of Law and Economics* 26, 395–427.

- Eberhart, A.C., Maxwell, W.F., Siddique, A.R., 2004. An examination of long-term abnormal stock returns and operating performance following R&D increases. *Journal of Finance* 59, 623–650.
- Edmans, A., Goldstein, I., Jiang, W., 2012. The real effects of financial markets: The impact of prices on takeovers. *Journal of Finance* 67, 933–971.
- Ellison, G., Glaeser, E.L., 1997. Geographic concentration in US manufacturing industries: A dartboard approach. *Journal of Political Economy* 105, 889–927.
- Ellison, G., Glaeser, E.L., 1999. The geographic concentration of industry: Does natural advantage explain agglomeration?. *American Economic Review* 89, 311–316.
- Ellison, G., Glaeser, E.L., Kerr, W.R., 2010. What causes industry agglomeration? Evidence from coagglomeration patterns. *American Economic Review* 100, 1195–1213.
- Erickson, T., Whited, T.M., 2000. Measurement error and the relationship between investment and q. *Journal of Political Economy* 108, 1027–1057.
- Erickson, T., Whited, T.M., 2012. Treating measurement error in Tobin's q. *Review of Financial Studies* 25, 1286–1329.
- Faleye, O., 2005. Cash and corporate control. *Journal of Finance* 59, 2041–2060.
- Fama, E.F., French, K.R., 1992. The cross-section of expected stock returns. *Journal of Finance* 47, 427–465.
- Fama, E.F., French, K.R., 1993. Common risk factors in the returns on stocks and bonds. *Journal of Financial Economics* 33, 3–56.
- Fisch, J.E., 2006. Measuring efficiency in corporate law: the role of shareholder primacy. *Journal of Corporation Law* 31, 637–674.
- Flammer, C., 2015. Corporate social responsibility and the allocation of procurement contracts: Evidence from a natural experiment. Unpublished working paper. Boston University.
- Flammer, C., Kacperczyk, A., 2015. The impact of stakeholder orientation on innovation: Evidence from a natural experiment. *Management Science* 62, 1982–2001.
- Francis, B.B., Hasan, I., John, K., Waisman, M., 2010. The effect of state antitakeover laws on the firm's bondholders. *Journal of Financial Economics* 96, 127–154.
- Friedman, M., 1962. *Capitalism and Freedom*, 40th ed. University of Chicago Press, Chicago, Illinois.
- Friedman, M., 1970. The social responsibility of business is to increase its profits. *New York Times Magazine* (September 13).
- Gao, H., Li, K., Ma, Y., 2019. Stakeholder orientation and the cost of debt: Evidence from a natural experiment. Unpublished working paper. University of British Columbia.

- Garvey, G.T., Hanka, G., 1999. Capital structure and corporate control: The effect of antitakeover statutes on firm leverage. *Journal of Finance* 54, 519–546.
- Geczy, C., Jeffers, J.S., Musto, D.K., Tucker, A.M., 2015. Institutional investing when shareholders are not supreme. *Harvard Business Law Review* 5, 73–139.
- Giroud, X., Mueller, H.M., 2010. Does corporate governance matter in competitive industries?. *Journal of Financial Economics* 95, 312–331.
- Giroud, X., Mueller, H.M., 2011. Corporate governance, product market competition, and equity prices. *Journal of Finance* 66, 563–600.
- Gompers, P., Ishii, J., Metrick, A., 2003. Corporate governance and equity prices. *Quarterly Journal of Economics* 118, 107–156.
- Gormley, T.A., Matsa, D.A., 2014. Common errors: How to (and not to) control for unobserved heterogeneity. *Review of Financial Studies* 27, 617–661.
- Gormley, T.A., Matsa, D.A., 2016. Playing it safe? Managerial preferences, risk, and agency conflicts. *Journal of Financial Economics* 122, 431–455.
- Gu, L., 2016. Product market competition, R&D investment, and stock returns. *Journal of Financial Economics* 119, 441–455.
- Hall, B.H., Jaffe, A., Trajtenberg, M., 2005. Market value and patent citations. *RAND Journal of Economics* 36, 16–38.
- Harris, E.G., 1990. Antitakeover measures, golden parachutes, and target firm shareholder welfare. *RAND Journal of Economics* 21, 614–625.
- Hart, O., Zingales, L., 2017. Companies should maximize shareholder welfare not market value. *Journal of Law, Finance, and Accounting* 2, 247–274.
- Heath, D., Ringgenberg, M.C., Samadi, M., Werner, I.M., 2019. Reusing natural experiments. Unpublished working paper. University of Utah.
- Heider, F., Ljungqvist, A., 2015. As certain as debt and taxes: Estimating the tax sensitivity of leverage from state tax changes. *Journal of Financial Economics* 118, 684–712.
- Henderson, J.V., Ono, Y., 2008. Where do manufacturing firms locate their headquarters?. *Journal of Urban Economics* 63, 431–450.
- Himmelberg, C.P., Hubbard, R.G., Palia, D., 1999. Understanding the determinants of managerial ownership and the link between ownership and performance. *Journal of Financial Economics* 53, 353–384.
- Jensen, M.C., 1986. Agency costs of free cash-flow, corporate finance, and takeovers. *American Economic Review* 76, 323–329.
- Jensen, M.C., Meckling, W.H., 1976. Theory of the firm: Managerial behavior, agency costs and ownership structure. *Journal of Financial Economics* 3, 305–360.

- Johnson, W.C., Karpoff, J.M., Yi, S., 2015. The bonding hypothesis of takeover defenses: Evidence from IPO firms. *Journal of Financial Economics* 117, 307–332.
- Johnson, W.C., Karpoff, J.M., Yi, S., 2019. The lifecycle effects of firm takeover defenses. Unpublished working paper. Suffolk University.
- Jung, K., Kim, Y-C., Stulz, R.M., 1996. Timing, investment opportunities, managerial discretion, and the security issue decision. *Journal of Financial Economics* 42, 159–185.
- Kadyrzhanova, D., Rhodes-Kropf, M., 2011. Concentrating on governance. *Journal of Finance* 66, 1649–1685.
- Kale, J.R., Shahrur, H., 2007. Corporate capital structure and the characteristics of suppliers and customers. *Journal of Financial Economics* 83, 321–365.
- Karpoff, J.M., Wittry, M.D., 2018. Institutional and legal context in natural experiments: The case of state antitakeover laws. *Journal of Finance* 73, 657–714.
- Keay, A., 2013. The enlightened shareholder value principle and corporate governance, 1st ed. Routledge, London, United Kingdom.
- Kempf, E., Spalt, O.G., 2019. Litigating innovation: Evidence from securities class action lawsuits. Unpublished working paper. University of Chicago.
- Klasa, S., Ortiz-Molina, H., Serfling, M., and Srinivasan, S., 2018. Protection of trade secrets and capital structure decisions. *Journal of Financial Economics* 128, 266–286.
- Knoeber, C.R., 1986. Golden parachutes, shark repellents, and hostile tender offers. *American Economic Review* 76, 155–167.
- Knott, A.M., 2008. R&D/returns causality: Absorptive capacity or organizational IQ. *Management Science* 54, 2054–2067.
- Kogan, L., Papanikolaou, D., Seru, A., Stoffman, N., 2017. Technological innovation, resource allocation, and growth. *Quarterly Journal of Economics* 132, 665–712.
- Laffont, J.-J., Tirole, J., 1988. Repeated auctions of incentive contracts, investment, and bidding parity with an application to takeovers. *RAND Journal of Economics* 19, 516–537.
- Lang, L.H.P., Stulz, R.M., 1994. Tobin's q, corporate diversification, and firm performance. *Journal of Political Economy* 102, 1248–1280.
- Lintner, J., 1965. Security prices, risk, and maximal gains from diversification. *Journal of Finance* 20, 587–615.
- Mackie-Mason, J.K., 1990. Do taxes affect corporate financing decisions?. *Journal of Finance* 45, 1471–1493.
- Magill, M., Quinzii, M., Rochet, J.-C., 2015. A theory of the stakeholder corporation. *Econometrica* 83, 1685–1725.

- Maksimovic, V., Phillips, G., 2001. The market for corporate assets: Who engages in mergers and asset sales and are there efficiency gains?. *Journal of Finance* 56, 2019–2065.
- Matsusaka, J.G., Ozbas, O., Yi, I., 2019. Opportunistic proposals by union shareholders. *Review of Financial Studies* 32, 3215–3265.
- Mitchell, M.L., Mulherin, J.H., 1996. The impact of industry shocks on takeover and restructuring activity. *Journal of Financial Economics* 41, 193–229.
- Morck, R., Shleifer, A., Vishny, R.W., 1988. Management ownership and market valuation: An empirical analysis. *Journal of Financial Economics* 20, 293–315.
- Morse, A., Nanda, V., Seru, A., 2011. Are incentive contracts rigged by powerful CEOs?. *Journal of Finance* 66, 1779–1821.
- Mossin, J., 1966. Equilibrium in a capital asset market. *Econometrica* 34, 768–783.
- Pagano, M., Volpin, P., 2005. Managers, workers, and corporate control. *Journal of Finance* 60, 841–868.
- Palia, D., 2001. The endogeneity of managerial compensation in firm valuation: A solution. *Review of Financial Studies* 14, 735–764.
- Parise, G., 2018. Threat of entry and debt maturity: Evidence from airlines. *Journal of Financial Economics* 127, 226–247.
- Peters, R.H., Taylor, L.A., 2017. Intangible capital and the investment-q relation. *Journal of Financial Economics* 123, 251–272.
- Phua, K., Tham, T.M., Wei, C., 2018. Are overconfident CEOs better leaders? Evidence from stakeholder commitments. *Journal of Financial Economics* 127, 519–545.
- Prowse, S.D., 1990. Institutional investment patterns and corporate financial behavior in the United States and Japan. *Journal of Financial Economics* 27, 43–66.
- Qiu, J., Yu, F., 2009. The market for corporate control and the cost of debt. *Journal of Financial Economics* 93, 505–524.
- Raman, K., Shahrur, H., 2008. Relationship-specific investments and earnings management: Evidence on corporate suppliers and customers. *Accounting Review* 83, 1041–1081.
- Rhodes-Kropf, M., Robinson, D.T., Viswanathan, S., 2005. Valuation waves and merger activity: The empirical evidence. *Journal of Financial Economics* 77, 561–603.
- Roberts, M.R., Whited, T.M., 2013. Endogeneity in Empirical Corporate Finance, in *Handbook of the Economics of Finance*, Arrow, K.J., Intriligator, M.D., eds., Elsevier, Oxford, United Kingdom.
- Sanati, A., 2018. How does labor mobility affect corporate leverage and investment?. Unpublished working paper. American University.
- Serfling, M., 2016. Firing costs and capital structure decisions. *Journal of Finance* 71, 2239–2286.

- Sharpe, W.F., 1964. Capital asset prices: A theory of market equilibrium under conditions of risk. *Journal of Finance* 19, 425–442.
- Shleifer, A., Summers, L.H., 1988. Breach of trust in hostile takeovers, in *Corporate Takeovers: Causes and Consequences*, Auerbach, A.J., ed., University of Chicago Press, Chicago, Illinois.
- Singh, M., Davidson III, W.N., 2003. Agency costs, ownership structure and corporate governance mechanisms. *Journal of Banking and Finance* 27, 793–816.
- Smith Jr, C.W., Warner, J.B., 1979. On financial contracting: An analysis of bond covenants. *Journal of Financial Economics* 7, 117–161.
- Smith Jr, C.W., Watts, R.L., 1992. The investment opportunity set and corporate financing, dividend, and compensation policies. *Journal of Financial Economics* 32, 263–292.
- Sorkin, A.R., 2018. BlackRock's message: Contribute to society, or risk losing our support. *New York Times Magazine* (January 16).
- Spamann, H., 2019. On inference when using state corporate laws for identification. Unpublished working paper. Harvard Law School.
- Stein, J.C., 1988. Takeover threats and managerial myopia. *Journal of Political Economy* 96, 61–80.
- Stein, J.C., 1989. Efficient capital markets, inefficient firms: A model of myopic corporate behavior. *Quarterly Journal of Economics* 104, 655–669.
- Stulz, R.M., 1988. Managerial control of voting rights: Financing policies and the market for corporate control. *Journal of Financial Economics* 20, 25–54.
- Tirole, J., 2001. Corporate governance. *Econometrica* 69, 1–35.
- Treynor, J.L., 1962. Jack Treynor's 'Toward a theory of market value of risky assets'. Unpublished working paper.
- Valta, P., 2016. Strategic default, debt structure, and stock returns. *Journal of Financial and Quantitative Analysis* 51, 197–229.
- Wilson, D.J., 2009. Beggar thy neighbor? The in-state, out-of-state, and aggregate effects of R&D tax credits. *Review of Economics and Statistics* 91, 431–436.
- Yermack, D., 1996. Higher market valuation of companies with a small board of directors. *Journal of Financial Economics* 40, 185–211.

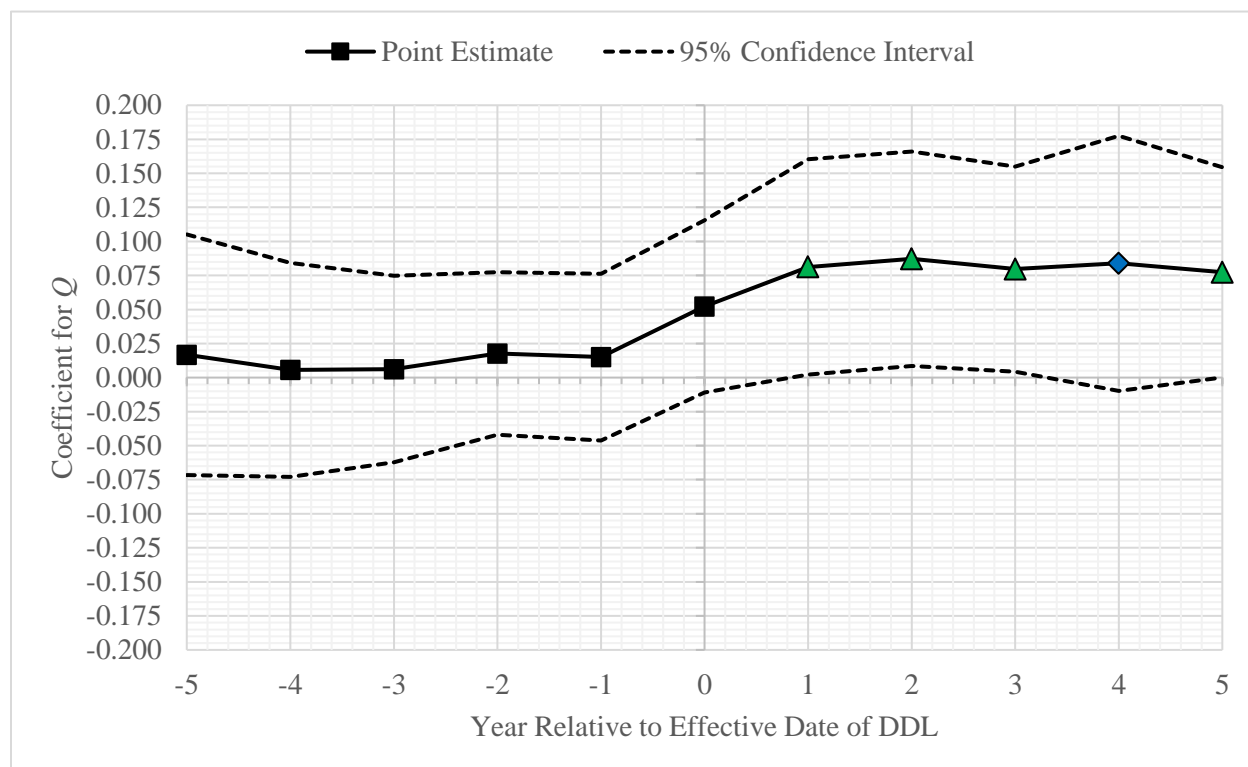


Figure 1

The impact of stakeholder orientation on firm value.

This figure shows the timing of the impact of an effective DDL on Q . We plot the coefficient estimates from regressing Q on firm, industry-by-year, and division-by-year fixed effects, the “Other antitakeover laws,” and dummy variables indicating the year relative to the effective date of the DDL on the y-axis. Our dummies are created for up to 10 years before and after their effective dates. The last dummy is set to one if 7 or more years have elapsed since the effective date of the DDL and zero otherwise. The x-axis shows the time relative to the effective date of the DDLs. Dashed lines correspond to the 95% confidence intervals of the coefficient estimates, calculated from robust standard errors clustered by state of incorporation. Green triangles (blue diamonds) denote significance at the 5% (10%) level. The sample period is from 1983-2015.

Table 1

Determinants of the adoption of DDLs by state legislatures.

This table reports results from either Cox proportional hazard models (columns 1-4) or a linear probability model (column 5) analyzing either the hazard or marginal propensity of a state legislature adopting a DDL. The sample period is 1983 to 2015. The dependent variable (i.e., “failure event”) is the passage of a DDL in a given state. Once a state adopts a DDL, it is excluded from the sample. Predictor variables are measured at the state-level and lagged one-year. [Section 3](#) and [Appendix Table A1](#) provide variable definitions. We standardize continuous predictor variables to have zero mean and unit variance. Each of the five columns include year fixed effects, while the last column also specifies incorporation state fixed effects. Standard errors are clustered by state of incorporation (*t*-statistics are in parentheses). *10%, **5%, and ***1% significance level.

Dependent variable: $DDL_{[t]}$	(1)	(2)	(3)	(4)	(5)
$BCL_{[t-1]}$	1.237 (0.47)	1.015 (0.03)	0.948 (-0.10)	0.958 (-0.08)	0.020 (0.33)
$CSL_{[t-1]}$	1.696 (1.37)	1.645 (1.33)	1.622 (1.19)	1.878 (1.54)	0.005 (0.09)
$FPL_{[t-1]}$	1.469 (1.09)	1.545 (1.22)	1.502 (0.83)	1.328 (0.56)	0.044 (0.73)
$PPL_{[t-1]}$	1.958 (1.56)	1.983 (1.59)	1.854 (1.34)	1.948 (1.49)	0.066 (1.34)
$WDL_{[t-1]}$		0.899 (-0.53)	0.887 (-0.62)	0.902 (-0.53)	-0.022 (-0.69)
$IDD_{[t-1]}$		0.831 (-0.40)	0.813 (-0.40)	0.854 (-0.28)	0.042 (1.27)
$R\&D\ Credit_{[t-1]}$		1.900 (1.31)	2.042 (1.36)	1.792 (1.06)	0.024 (0.44)
$M\&A\ Intensity_{[t-1]}$		0.928 (-0.39)	0.830 (-0.57)	0.793 (-0.59)	-0.013 (-0.46)
$Hostile\ M\&A\ Intensity_{[t-1]}$		1.171 (1.18)	1.182 (1.28)	1.204 (1.42)	0.010 (0.86)
$M\&A\ Deal\ Size_{[t-1]}$		1.091 (0.52)	1.098 (0.60)	1.139 (0.85)	0.006 (1.03)
$Union\ Coverage_{[t-1]}$		0.625 (-0.27)	0.430 (-0.47)	0.528 (-0.28)	0.085 (0.59)
$Union\ Membership_{[t-1]}$		1.988 (0.34)	3.289 (0.56)	2.404 (0.32)	-0.126 (-0.68)
$Ln(GDPPC)_{[t-1]}$			0.675 (-0.51)	1.611 (0.50)	0.102 (0.96)
$GDP\ Growth_{[t-1]}$			1.175 (0.80)	1.169 (0.50)	-0.002 (-0.13)
$Political\ Rep_{[t-1]}$			0.642 (-1.55)	0.534* (-1.81)	-0.009 (-0.70)
$Ln(Population)_{[t-1]}$			1.288 (0.58)	1.400 (0.59)	-0.087 (-0.42)
$Unemployment\ Rate_{[t-1]}$			1.056 (0.27)	1.294 (1.12)	0.016 (0.85)
$Inc.SY\ Q_{[t-1]}$				1.086 (0.17)	-0.001 (-0.07)

<i>Inc. SY $\Delta Q_{[t-1]}$</i>				1.901 (1.08)	0.000 (0.01)
<i>Inc. SY Return_[t-1]</i>				1.202 (0.26)	0.007 (0.35)
<i>Inc. SY Δ Return_[t-1]</i>				0.640 (-1.01)	-0.008 (-0.62)
<i>Inc. SY Δ ROA_[t-1]</i>				1.225 (0.40)	0.022 (1.09)
<i>Inc. SY ROA_[t-1]</i>				1.368 (0.86)	-0.005 (-0.23)
Year FE	Yes	Yes	Yes	Yes	Yes
Incorporation State FE	No	No	No	No	Yes
Observations	818	697	697	651	651
Pseudo R ² /Adjusted R ²	0.026	0.033	0.047	0.070	0.189

Table 2

The value of stakeholder orientation.

This table reports results from OLS regressions of Tobin's Q on a DDL indicator variable over the sample period 1983 to 2015. The dependent variable is Q : defined as the market value of assets divided by the book value of assets (following Fama and French, 1992). DDL is an indicator variable equal to one if a firm is incorporated in a state with an effective DDL, and zero otherwise. The last two columns include dummies for "Other antitakeover laws" (BCL ; CSL ; FPL ; PPL). We do not report their coefficients to conserve space. Section 3 and Appendix Table A1 provide variable definitions. Industry fixed effects are defined by Fama-French 49 industry classifications, and division fixed effects are measured using U.S. Census divisions. Continuous (except state-level) variables are winsorized at the 2.5% level in both tails. Standard errors are clustered by state of incorporation (t -statistics are in parentheses). *10%, **5%, and ***1% significance level.

Dependent variable: $Q_{[t]}$	(1)	(2)	(3)	(4)	(5)
$DDL_{[t]}$	0.058** (2.57)	0.067*** (3.04)	0.061** (2.60)	0.072** (2.37)	0.067** (2.15)
$Size_{[t-1]}$			-0.354*** (-20.35)	-0.354*** (-20.29)	-0.351*** (-19.00)
$Ln(Age)_{[t-1]}$			-0.245*** (-6.22)	-0.246*** (-6.23)	-0.243*** (-6.09)
$HHI_{[t-1]}$			0.015 (0.30)	0.014 (0.29)	0.030 (0.68)
$SG_{[t-1]}$			0.224*** (16.15)	0.224*** (16.24)	0.236*** (17.43)
$Loss_{[t-1]}$			-0.068*** (-6.02)	-0.068*** (-6.03)	-0.068*** (-6.64)
$Debt_{[t-1]}$			-0.026*** (-9.40)	-0.026*** (-9.43)	-0.027*** (-9.75)
$FLIQ_{[t-1]}$			-0.004 (-0.13)	-0.005 (-0.14)	0.015 (0.41)
$CAPX/Assets_{[t-1]}$			0.347*** (3.00)	0.347*** (3.01)	0.367*** (3.34)
$R\&D/Sales_{[t-1]}$			2.603*** (22.95)	2.604*** (22.93)	2.616*** (24.32)
$IO_{[t-1]}$			0.389*** (17.85)	0.389*** (17.54)	0.383*** (17.01)
$Ln(GDPPC)_{[t-1]}$					0.508** (2.07)
$GDP\ Growth_{[t-1]}$					0.468** (2.31)
$Political\ Rep_{[t-1]}$					0.009 (0.52)
Other antitakeover laws	No	No	No	Yes	Yes
Firm FE	Yes	Yes	Yes	Yes	Yes
Industry \times Year FE	Yes	Yes	Yes	Yes	Yes
Division \times Year FE	No	Yes	Yes	Yes	Yes
Observations	101,989	101,989	101,989	101,989	101,989
Adjusted R^2	0.565	0.566	0.597	0.597	0.597

Table 3

The value of stakeholder orientation in a matched sample.

This table reports summary statistics and OLS regression results for a matched sample. *Treated* (control) firms are defined as companies incorporated in states with (without) an effective DDL (in at least the five-year period following the effective date for its matched counterpart). We use propensity score matching with replacement in year $t - 1$ to create a sample matched on Q , $Size$, $Ln(Age)$, $Loss$, IO , $Strategic Alliance$, $Supplier Dependency$, $Unsecured Debt$, $Ln(1 + Patent)$ and exactly on Fama-French 49 industry classifications and U.S. Census divisions. Panel A shows pre-treatment year summary statistics (columns 1-2). We also report the differences (column 3) between sample means (t -statistics are in parentheses). Panel B provides matched sample Q regression results over a $(t \pm 3)$ estimation window. $Post$ is set equal to one in the year of and three-year period following a state's effective DDL date, and zero otherwise. We use the variable name $Treated \times Post$ (instead of DDL) to signify we are using a matched sample. Control variables include: $Size$, $Ln(Age)$, HHI , SG , $Loss$, $Debt$, $FLIQ$, $CAPX/Assets$, $R\&D/Sales$, IO (i.e., "Firm-level controls"), BCL , CSL , FPL , PPL (i.e., "Other antitakeover laws"), and $Ln(GDPPC)$, $GDP Growth$, and $Political Rep$ (i.e., "State-level controls"). [Section 3](#) and [Appendix Table A1](#) provide variable definitions. *Treated* and *Post* are omitted due to collinearity with fixed effects. Industry fixed effects are defined by Fama-French 49 industry classifications, and division fixed effects are measured using U.S. Census divisions. Continuous (except state-level) variables are winsorized at the 2.5% level in both tails. Standard errors are clustered by state of incorporation (t -statistics are in parentheses). *10%, **5%, and ***1% significance level.

<i>Panel A: Pre-treatment year (t-1) summary statistics</i>			
	Treated (1)	Control (2)	Difference (3)
$Q_{[t]}$	1.706 (1.218)	1.668 (1.129)	0.039 (0.75)
$Size_{[t]}$	4.647 (2.004)	4.776 (1.990)	-0.128 (-1.47)
$Ln(Age)_{[t]}$	2.406 (0.727)	2.409 (0.725)	-0.003 (-0.10)
$Loss_{[t]}$	0.320 (0.467)	0.340 (0.474)	-0.020 (-0.98)
$IO_{[t]}$	0.154 (0.212)	0.149 (0.214)	0.006 (0.59)
$Strategic Alliance_{[t]}$	0.013 (0.115)	0.014 (0.119)	-0.001 (-0.19)
$Supplier Dependency_{[t]}$	0.004 (0.013)	0.003 (0.011)	0.001 (1.54)
$Unsecured Debt_{[t]}$	0.542 (0.396)	0.529 (0.405)	0.013 (0.73)
$Ln(Patent)_{[t]}$	0.060 (0.176)	0.055 (0.154)	0.004 (0.62)
$FF49 Industry_{[t]}$	28.646 (11.915)	28.646 (11.915)	0.000 (0.00)
$Census Division_{[t]}$	4.145 (2.427)	4.145 (2.427)	0.000 (0.00)
Observations (by group)	1,038	1,038	

Table 3
Continued.

<i>Panel B: Matched sample Q regressions</i>					
	(1)	(2)	(3)	(4)	(5)
$Treated_{[t]} \times Post_{[t]}$	0.039** (2.15)	0.048** (2.22)	0.049** (2.33)	0.050** (2.31)	0.051** (2.08)
Firm-level controls	No	No	Yes	Yes	Yes
Other antitakeover laws	No	No	No	Yes	Yes
State-level controls	No	No	No	No	Yes
Firm FE	Yes	Yes	Yes	Yes	Yes
Industry \times Year FE	Yes	Yes	Yes	Yes	Yes
Division \times Year FE	No	Yes	Yes	Yes	Yes
Observations	10,081	10,081	10,081	10,081	10,081
Adjusted R ²	0.693	0.697	0.709	0.711	0.719

Table 4

Stakeholder orientation and alternative value measures.

This table reports results from OLS regressions using alternative value measures. Panel A (B) is specific to the main (matched) sample over the period (estimation windows of) 1983 to 2015 ($t \pm 3$). The dependent variables in these panels include: *Mkt Adj. Excess Ret* (column 1) is defined as the residual from annual regressions of raw returns on a value-weighted market factor; *FF4 Adj. Excess Ret* (column 2) is defined as the residual from annual regressions of raw returns on a value-weighted market factor plus small-minus-big, high-minus-low, and momentum factors. *Total Q* (column 3) equals the market value of outstanding equity plus the book value of debt minus the firm's current assets divided by the sum of physical and intangible capital; *ROA* (column 4) is measured as net income scaled by the total book value of assets; *ROCE* (column 5) is defined as earnings before interest and taxes over the sum of debt in long-term and current liabilities and common equity. Control variables include: *Size*, *Ln(Age)*, *HHI*, *SG*, *Loss*, *Debt*, *FLIQ*, *CAPX/Assets*, *R&D/Sales*, *IO*, *Ln(GDPPC)*, *GDP Growth*, *Political Rep* (i.e., "Control variables"), *BCL*, *CSL*, *FPL*, and *PPL* (i.e., "Other antitakeover laws"). Industry fixed effects are defined by Fama-French 49 industry classifications, and division fixed effects are measured using U.S. Census divisions. Continuous (except state-level) variables are winsorized at the 2.5% level in both tails. Standard errors are clustered by state of incorporation (t -statistics are in parentheses). Panel C reports abnormal returns of monthly portfolios using the treated and control firms from the matched sample. The long portfolios are composed in the following manner. For portfolios *6m12* and *6m24* we include all stocks of matched firms that are incorporated in enacting states starting 6 months before the fiscal year-end of the year in which the incorporating state has an effective DDL in place and hold these stocks for 12 or 24 months. Similarly, the short portfolios are constructed by including all stocks of control firms that are matched to a treated company incorporated in enacting states starting 6 months before the fiscal year-end of the year in which that treated incorporating state has an effective DDL in place, and short these control group stocks for 12 or 24 months. The long-short portfolios are then created by differencing the portfolio returns of the long and short portfolios, for each respective month. We use two models: the four-factor [Carhart \(1997\)](#) model (i.e., MktRf, SMB, HML, and MOM), and the three-factor [Fama-French \(1993\)](#) model (i.e., MktRf, SMB, and HML), where each of the models uses a value-weighted market factor. The portfolio returns are winsorized at the 2.5% level in both tails. Standard errors are corrected for heteroskedasticity and autocorrelation (t -statistics are in parentheses). The number of stocks in the long and short portfolios are averaged across all months and displayed in the "Average # firms" row. The "M" row shows the total number of monthly observations, and the "N" row shows the total number of firms with useable returns. [Section 3](#) and [Appendix Table A1](#) provide variable definitions. *10%, **5%, and ***1% significance level.

Table 4
Continued.

<i>Panel A: Alternative value measures in the main sample</i>					
Dependent variables:	<i>Mkt Adj. Excess Ret_[t]</i>	<i>FF4 Adj. Excess Ret_[t]</i>	<i>Total Q_[t]</i>	<i>ROA_[t+1]</i>	<i>ROCE_[t+1]</i>
	(1)	(2)	(3)	(4)	(5)
<i>DDL_[t]</i>	0.024** (2.08)	0.023** (2.01)	0.046* (1.79)	0.008** (2.05)	0.009* (1.82)
Control variables	Yes	Yes	Yes	Yes	Yes
Other antitakeover laws	Yes	Yes	Yes	Yes	Yes
Firm FE	Yes	Yes	Yes	Yes	Yes
Industry × Year FE	Yes	Yes	Yes	Yes	Yes
Division × Year FE	Yes	Yes	Yes	Yes	Yes
Observations	101,989	101,989	101,560	90,844	86,775
Adjusted R ²	0.123	0.097	0.570	0.526	0.598
<i>Panel B: Alternative value measures in the matched sample</i>					
Dependent variables:	<i>Mkt Adj. Excess Ret_[t]</i>	<i>FF4 Adj. Excess Ret_[t]</i>	<i>Total Q_[t]</i>	<i>ROA_[t+1]</i>	<i>ROCE_[t+1]</i>
	(1)	(2)	(3)	(4)	(5)
<i>Treated_[t] × Post_[t]</i>	0.050** (2.28)	0.049** (2.20)	0.056* (1.70)	0.009* (1.69)	0.011** (2.04)
Control variables	Yes	Yes	Yes	Yes	Yes
Other antitakeover laws	Yes	Yes	Yes	Yes	Yes
Firm FE	Yes	Yes	Yes	Yes	Yes
Industry × Year FE	Yes	Yes	Yes	Yes	Yes
Division × Year FE	Yes	Yes	Yes	Yes	Yes
Observations	10,081	10,081	10,081	9,955	9,623
Adjusted R ²	0.148	0.154	0.674	0.452	0.660

Table 4
Continued.

<i>Panel C: Portfolio analysis in the matched sample</i>						
Portfolio “6m12”	Four-factor model			Three-factor model		
	Long	Short	Long - Short	Long	Short	Long - Short
<i>Alpha</i> (monthly)	0.503** (2.05)	0.070 (0.02)	0.433* (1.72)	0.484** (2.01)	-0.254 (-0.79)	0.738** (1.99)
Average # firms	101.35	100.82	-	101.35	100.82	-
M	170	170	170	170	170	170
N	992	990	-	992	990	-
Adjusted R ²	0.710	0.328	0.092	0.711	0.307	0.077

Portfolio “6m24”	Four-factor model			Three-factor model		
	Long	Short	Long - Short	Long	Short	Long - Short
<i>Alpha</i> (monthly)	0.618*** (2.89)	0.082 (0.59)	0.536* (1.74)	0.541*** (2.70)	-0.064 (-0.21)	0.606* (1.73)
Average # firms	130.20	128.11	-	130.20	128.11	-
M	212	212	212	212	212	212
N	992	991	-	992	991	-
Adjusted R ²	0.670	0.288	0.069	0.669	0.285	0.072

Table 5

Stakeholder orientation and non-financial stakeholders.

This table reports results from OLS regressions analyzing the effect of DDLs on firms more reliant on non-financial stakeholders over the period 1983 to 2015. Panel A shows the coefficients from OLS regressions of Q on DDL interacted with measures of non-financial stakeholder reliance. *Labor Intensity* (column 1) is measured as the number of employees divided by real sales, where sales are adjusted using 2015 dollars. *Large Customer* (column 2) is an indicator variable equal to one if a firm's percentage of customer sales is greater than the sample average, and zero otherwise. *Supplier Dependency* (column 3) equals the product of the supplier's R&D expenditure and the fraction of sales to the customer, divided by total assets of the supplier. *Strategic Alliance* (column 4) is an indicator equal to one if the firm is in an active strategic alliance based on the SDC Strategic Alliance database, and zero otherwise. Panel B presents the estimates from OLS regressions of employee stakeholder outcomes on DDL interacted with a measure of firm profitability. The employment outcome variables include: $\text{abs}(\Delta \text{Employee})$ (column 1) which equals the absolute value of the one-year percentage change (Δ) in a firm's number of employees; $\text{abs}(\Delta \text{SG\&A})$ (column 2) which equals the absolute value of the one-year percentage change (Δ) in a firm's selling, general, and administrative expenses; $\text{abs}(\Delta \text{P\&R})$ (column 3) which equals the absolute value of the one-year percentage change (Δ) in a firm's pension and retirement expenses. The interacted variable, $\text{abs}(\Delta \text{Profitability})$, equals the absolute value of the one-year change (Δ) in a firm's profitability. Control variables include: *Size*, *Ln(Age)*, *HHI*, *SG*, *Loss*, *Debt*, *FLIQ*, *CAPX/Assets*, *R\&D/Sales*, *IO*, *Ln(GDPPC)*, *GDP Growth*, *Political Rep* (i.e., "Control variables"), *BCL*, *CSL*, *FPL*, and *PPL* (i.e., "Other antitakeover laws"). Section 3 and Appendix Table A1 provide variable definitions. Industry fixed effects are defined by Fama-French 49 industry classifications, and division fixed effects are measured using U.S. Census divisions. Continuous (except state-level) variables are winsorized at the 2.5% level in both tails. Standard errors are clustered by state of incorporation (t -statistics are in parentheses). *10%, **5%, and ***1% significance level.

Table 5
Continued.

<i>Panel A: The heterogeneous value effects of stakeholder orientation for non-financial stakeholders</i>				
Dependent variable: $Q_{[t]}$	(1)	(2)	(3)	(4)
$DDL_{[t]} \times Labor\ Intensity_{[t-1]}$	0.046*** (4.12)			
$DDL_{[t]} \times Large\ Customer_{[t-1]}$		0.115*** (3.08)		
$DDL_{[t]} \times Supplier\ Dependency_{[t-1]}$			1.070** (2.19)	
$DDL_{[t]} \times Strategic\ Alliance_{[t-1]}$				0.150** (2.15)
$DDL_{[t]}$	0.063** (2.15)	0.061** (2.05)	0.064** (2.08)	0.060* (1.90)
$Labor\ Intensity_{[t-1]}$	0.013*** (3.51)			
$Large\ Customer_{[t-1]}$		0.040* (1.73)		
$Supplier\ Dependency_{[t-1]}$			0.010*** (8.40)	
$Strategic\ Alliance_{[t-1]}$				-0.030 (-0.72)
Control variables	Yes	Yes	Yes	Yes
Other antitakeover laws	Yes	Yes	Yes	Yes
Firm FE	Yes	Yes	Yes	Yes
Industry \times Year FE	Yes	Yes	Yes	Yes
Division \times Year FE	Yes	Yes	Yes	Yes
Observations	100,576	101,989	101,989	101,989
Adjusted R^2	0.599	0.599	0.599	0.599

<i>Panel B: The effect of stakeholder orientation on employees</i>			
Dependent variables:	$abs(\Delta Employee)_{[t+1]}$	$abs(\Delta SG\&A)_{[t+1]}$	$abs(\Delta P\&R)_{[t+1]}$
	(1)	(2)	(3)
$DDL_{[t]}$	-0.031* (-1.68)	-0.016 (-0.69)	0.003 (0.06)
$abs(\Delta Profitability)_{[t-1]}$	0.023*** (9.24)	0.027*** (12.09)	0.011*** (3.17)
$DDL_{[t]} \times abs(\Delta Profitability)_{[t-1]}$	-0.023*** (-4.17)	-0.014* (-1.95)	-0.020* (1.68)
Control variables	Yes	Yes	Yes
Other antitakeover laws	Yes	Yes	Yes
Firm FE	Yes	Yes	Yes
Industry \times Year FE	Yes	Yes	Yes
Division \times Year FE	Yes	Yes	Yes
Observations	93,875	87,628	64,161
Adjusted R^2	0.260	0.329	0.132

Table 6

Stakeholder orientation and creditors.

This table reports results from OLS regressions analyzing the effect of DDLs on firms more reliant on creditor stakeholders over the period 1983 to 2015. Panel A shows the coefficients from OLS regressions of Q on DDL interacted with measures of the importance of a firm's relationship with creditor stakeholders. *Unsecured Debt* (column 1) is the ratio of unsecured debt to total debt. *Ind. CF Risk* (column 2) is the operating cash flow volatility for a three-digit SIC code industry, where cash flow volatility is the standard deviation of ROA over a 7-year rolling window. *Creditor Reliance* (column 3) is an indicator equal to one if a firm has a value of *Debt* greater than the sample-year median, and zero otherwise. *Default Risk* (column 4) is an indicator variable equal to one if a firm has a modified Z'' -Score below the sample-year median, and zero otherwise. Panel B presents the estimates from OLS regressions of financial soundness outcomes on DDL . The financial soundness outcomes include: *Loss* (column 1) is an indicator set to one if a firm has negative net income during a fiscal year, and zero otherwise; *Default Risk* (column 2); *ST Debt* (column 3) equals short-term debt divided by total debt. Control variables, unless specified as a dependent variable, include: *Size*, $\ln(Age)$, *HHI*, *SG*, *Loss*, *Debt*, *FLIQ*, *CAPX/Assets*, *R&D/Sales*, *IO*, $\ln(GDPPC)$, *GDP Growth*, *Political Rep* (i.e., "Control variables"), *BCL*, *CSL*, *FPL*, and *PPL* (i.e., "Other antitakeover laws"). Section 3 and Appendix Table A1 provide variable definitions. Industry fixed effects are defined by Fama-French 49 industry classifications, and division fixed effects are measured using U.S. Census divisions. Continuous (except state-level) variables are winsorized at the 2.5% level in both tails. Standard errors are clustered by state of incorporation (t -statistics are in parentheses). *10%, **5%, and ***1% significance level.

Table 6
Continued.

<i>Panel A: The heterogeneous value effects of stakeholder orientation for creditors</i>				
Dependent variable: $Q_{[t]}$	(1)	(2)	(3)	(4)
$DDL_{[t]} \times Unsecured\ Debt_{[t-1]}$	0.046** (2.33)			
$DDL_{[t]} \times Ind.\ CF\ Risk_{[t-1]}$		0.107** (2.41)		
$DDL_{[t]} \times Creditor\ Reliance_{[t-1]}$			0.057*** (2.72)	
$DDL_{[t]} \times Default\ Risk_{[t-1]}$				0.064* (1.87)
$DDL_{[t]}$	0.037 (1.31)	0.040 (1.08)	0.036 (1.06)	0.042 (1.33)
$Unsecured\ Debt_{[t-1]}$	0.012 (1.12)			
$Ind.\ CF\ Risk_{[t-1]}$		-0.017 (-0.55)		
$Creditor\ Reliance_{[t-1]}$			-0.257*** (-23.92)	
$Default\ Risk_{[t-1]}$				-0.187*** (-8.19)
Control variables	Yes	Yes	Yes	Yes
Other antitakeover laws	Yes	Yes	Yes	Yes
Firm FE	Yes	Yes	Yes	Yes
Industry \times Year FE	Yes	Yes	Yes	Yes
Division \times Year FE	Yes	Yes	Yes	Yes
Observations	87,421	101,989	101,989	101,989
Adjusted R^2	0.605	0.595	0.597	0.599

<i>Panel B: The effect of stakeholder orientation on financial soundness</i>			
Dependent variables:	$Loss_{[t+1]}$	$Default\ Risk_{[t+1]}$	$ST\ Debt_{[t+1]}$
	(1)	(2)	(3)
$DDL_{[t]}$	-0.019** (-2.34)	-0.022* (-1.82)	-0.016** (-2.22)
Control variables	Yes	Yes	Yes
Other antitakeover laws	Yes	Yes	Yes
Firm FE	Yes	Yes	Yes
Industry \times Year FE	Yes	Yes	Yes
Division \times Year FE	Yes	Yes	Yes
Observations	90,921	90,922	79,576
Adjusted R^2	0.403	0.658	0.509

Table 7

Stakeholder orientation and innovative firms.

This table reports results from OLS regressions analyzing the effect of DDLs on firms more reliant on investments in innovation over the period 1983 to 2015. Panel A shows the coefficients from OLS regressions of Q on DDL interacted with measures of the importance of a firm's investments in innovative activity. $R\&D/Sales$ (column 1) is a firm's research and development expenditure divided by the value of sales. $Investment\ Rate$ (column 2) is equal to capital expenditures plus acquisitions minus the sale of property, over the book value of assets. $Ln(1 + CW\ Patent)$ (column 3) is the natural logarithm of one plus the citation weighted-value of a firm's patents. RQ (column 4) is a firm's research quotient, measured as a firm-specific output elasticity of R&D, representing the percentage change in revenues for a 1% change in R&D (proposed in [Knott, 2008](#)). Panel B presents the estimates from OLS regressions of innovative activity outcomes on DDL . The innovative activity outcomes include: $R\&D/Sales$ (column 1); $Ln(1 + CW\ Patent)$ (column 2); $Ln(1 + SM\ Patent)$ (column 3) is the natural logarithm of one plus the stock market-value of a firm's patents (proposed in [Kogan et al., 2017](#)). Control variables, unless specified as a dependent variable, include: $Size$, $Ln(Age)$, HHI , SG , $Loss$, $Debt$, $FLIQ$, $CAPX/Assets$, $R\&D/Sales$, IO , $Ln(GDPPC)$, $GDP\ Growth$, $Political\ Rep$ (i.e., "Control variables"), BCL , CSL , FPL , and PPL (i.e., "Other antitakeover laws"). [Section 3](#) and [Appendix Table A1](#) provide variable definitions. Industry fixed effects are defined by Fama-French 49 industry classifications, and division fixed effects are measured using U.S. Census divisions. Continuous (except state-level) variables are winsorized at the 2.5% level in both tails. Standard errors are clustered by state of incorporation (t -statistics are in parentheses). *10%, **5%, and ***1% significance level.

Table 7
Continued.

<i>Panel A: The heterogeneous value effects of stakeholder orientation for innovative firms</i>				
Dependent variable: $Q_{[t]}$	(1)	(2)	(3)*	(4)
$DDL_{[t]} \times R\&D/Sales_{[t-1]}$	0.872** (2.27)			
$DDL_{[t]} \times Investment\ Rate_{[t-1]}$		0.420*** (2.68)		
$DDL_{[t]} \times Ln(1 + CW\ Patent)_{[t-1]}$			0.029** (2.04)	
$DDL_{[t]} \times RQ_{[t-1]}$				0.630** (2.13)
$DDL_{[t]}$	0.037 (1.19)	0.029 (1.06)	0.034 (0.97)	-0.059 (-1.06)
$R\&D/Sales_{[t-1]}$	0.983*** (12.44)			
$Investment\ Rate_{[t-1]}$		-0.029 (-0.53)		
$Ln(1 + CW\ Patent)_{[t-1]}$			0.002 (0.26)	
$RQ_{[t-1]}$				-0.071 (-0.75)
Control variables	Yes	Yes	Yes	Yes
Other antitakeover laws	Yes	Yes	Yes	Yes
Firm FE	Yes	Yes	Yes	Yes
Industry \times Year FE	Yes	Yes	Yes	Yes
Division \times Year FE	Yes	Yes	Yes	Yes
Observations	101,989	89,894	90,776	33,605
Adjusted R^2	0.592	0.600	0.598	0.617

<i>Panel B: The effect of stakeholder orientation on innovative activity</i>			
Dependent variables:	$R\&D/Sales_{[t+1]}$	$Ln(1 + CW\ Patent)_{[t+1]}$	$Ln(1 + SM\ Patent)_{[t+1]}$
	(1)	(2) [†]	(3)
$DDL_{[t]}$	0.003** (2.07)	0.042* (1.69)	0.068** (2.35)
Control variables	Yes	Yes	Yes
Other antitakeover laws	Yes	Yes	Yes
Firm FE	Yes	Yes	Yes
Industry \times Year FE	Yes	Yes	Yes
Division \times Year FE	Yes	Yes	Yes
Observations	90,922	82,192	82,192
Adjusted R^2	0.710	0.747	0.750

* The regression analysis in column 3 ends in 2010, since this is as far as the patent data extends.

[†] The regression analysis in columns 2 and 3 ends in 2009 since the patent data only extends to 2010 and our $Ln(1 + CW\ Patent)$ and $Ln(1 + SM\ Patent)$ dependent variables are $(t + 1)$.

Table 8

Stakeholder orientation and agency costs.

This table reports results from OLS regressions analyzing the effect of DDLs on firms characterized by higher agency costs. The sample period in column 1 (columns 2-6) is 1992 to 2015 (1983 to 2015). Measures of *Agency Cost* include: *Long Tenured CEO* (column 1) is an indicator variable equal to one if a firm's CEO's tenure lies in the top tercile of its sample-year empirical distribution, and zero otherwise. *Strong Union* (column 2) is an indicator variable equal to one if a firm is headquartered in a state with *Union Membership* that lies in the top tercile of its sample-year empirical distribution, and zero otherwise. *Union Membership* represents the percentage of nonagricultural wage and salary workers who are union members. *Low AU* (column 3) is an indicator variable equal to one if a firm has an asset utilization (*AU*) ratio that lies in the bottom tercile of its sample-year empirical distribution, and zero otherwise. *AU* is defined as the value of a firm's sales divided by its total book value of assets; *Excessive OE* (column 4) is an indicator variable equal to one if a firm has operating expenses (*OE*) that lies the top tercile of its sample-year empirical distribution, and zero otherwise. *OE* is defined as the ratio of a firm's cost of goods sold plus its selling, general, and administrative expenses over its total sales. *High FCF* (column 5) is an indicator variable equal to one if a firm's free cash flows (*FCF*) lies the top tercile of its sample-year empirical distribution, and zero otherwise. *FCF* is defined as operating activities/net cash flow minus capital expenditures divided by total assets. Control variables include: *Size*, *Ln(Age)*, *HHI*, *SG*, *Loss*, *Debt*, *FLIQ*, *CAPX/Assets*, *R&D/Sales*, *IO*, *Ln(GDPPC)*, *GDP Growth*, *Political Rep* (i.e., "Control variables"), *BCL*, *CSL*, *FPL*, and *PPL* (i.e., "Other antitakeover laws"). [Section 3](#) and [Appendix Table A1](#) provide variable definitions. Industry fixed effects are defined by Fama-French 49 industry classifications, and division fixed effects are measured using U.S. Census divisions. Continuous (except state-level) variables are winsorized at the 2.5% level in both tails. The row "Test for joint significance" tests whether the effect of DDLs on *Q* for a firm with higher agency costs is different from zero during the sample period. Standard errors are clustered by state of incorporation (*t*-statistics are in parentheses). *10%, **5%, and ***1% significance level.

Table 8
Continued.

Dependent variable: $Q_{[t]}$	(1)	(2)	(3)	(4)	(5)
$DDL_{[t]} \times Long\ Tenured\ CEO_{[t-1]}$	-0.152*** (-3.17)				
$DDL_{[t]} \times Strong\ Union_{[t-1]}$		-0.039* (-1.82)			
$DDL_{[t]} \times Low\ AU_{[t-1]}$			-0.047* (-1.99)		
$DDL_{[t]} \times Excessive\ OE_{[t-1]}$				-0.052** (-2.43)	
$DDL_{[t]} \times High\ FCF_{[t-1]}$					-0.068*** (-3.43)
$DDL_{[t]}$	0.127* (1.92)	0.081** (2.58)	0.078** (2.46)	0.074** (2.39)	0.107*** (2.85)
$Long\ Tenured\ CEO_{[t-1]}$	0.039** (2.08)				
$Strong\ Union_{[t-1]}$		-0.011 (-0.79)			
$Low\ AU_{[t-1]}$			-0.068*** (-4.74)		
$Excessive\ OE_{[t-1]}$				-0.151*** (-13.47)	
$High\ FCF_{[t-1]}$					0.215*** (28.19)
Control variables	Yes	Yes	Yes	Yes	Yes
Other antitakeover laws	Yes	Yes	Yes	Yes	Yes
Firm FE	Yes	Yes	Yes	Yes	Yes
Industry \times Year FE	Yes	Yes	Yes	Yes	Yes
Division \times Year FE	Yes	Yes	Yes	Yes	Yes
Observations	29,376	101,989	101,989	93,692	90,463
Adjusted R^2	0.605	0.594	0.594	0.600	0.591
Test for joint significance:					
$[DDL_{[t]} \times Agency\ Cost_{[t-1]} + DDL_{[t]}]$	-0.024 (-0.30)	0.042 (1.24)	0.031 (0.84)	0.022 (0.64)	0.040 (1.08)