

# Labor Adjustment Costs and Capital Structure Decisions

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## ABSTRACT

This paper investigates how the costs associated with dismissing employees impact a firm's capital structure decisions. I hypothesize that increases in these labor adjustment costs reduce a firm's optimal amount of debt financing by lowering expected profitability and raising financial distress costs and operating leverage. To test this hypothesis, I adopt a difference-in-differences research design and exploit the passage of state-level wrongful discharge laws that allow workers to sue employers for unjust dismissal as an exogenous increase in labor adjustment costs. I find robust evidence that firms reduce financial leverage ratios following the passage of these laws. This finding is driven by firms whose employees are more likely protected by these laws, firms whose employees are more likely to file wrongful termination lawsuits, and firms that are more likely to lay off workers. Additional analyses suggest that reverse causality and omitted variables related to local economic conditions, changes in the types of workers that a firm employs, and changes in the nature of a firm's operations do not drive these results. Lastly, firms also hold more cash and investors place a higher value on each additional dollar of cash holdings following the passage of wrongful discharge laws. Overall, my findings imply that labor market frictions in the form of labor adjustment costs can have a significant impact on a firm's financing decisions.

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Traditional theories in finance typically view capital structure decisions as a function of the tax benefits of debt and the costs of bankruptcy, asymmetric information between firms and capital markets, and agency problems.<sup>1</sup> While these theories can partially explain debt policies, there are still aspects of financing decisions that remain a puzzle.<sup>2</sup> In an attempt to partly resolve these issues, a growing strand of work has turned to labor market frictions as a determinant of capital structure decisions. One such source of labor market frictions are the costs associated with dismissing employees. Within the United States, there has been a trend toward the passage of laws designed to provide employees with greater protection from unjust dismissal. The passage of these labor protection laws makes it more difficult and costlier for a firm to discharge its employees, resulting in rising “labor adjustment costs.” These types of laws pose a nontrivial risk and cost for firms. For example, a 2012 survey finds that 46% of public firms express concerns about potential litigation and financial losses arising from lawsuits related to the violation of labor protection laws.<sup>3</sup> These concerns are justified given that wrongful termination lawsuits have had settlements reaching nearly \$5.4 million in recent years (Boxold (2008)).

In this study, I investigate how increases in the costs associated with dismissing employees that arise from the passage of labor protection laws impact a firm’s capital structure decisions. I hypothesize that a firm’s optimal amount of debt financing is lower when it faces higher labor adjustment costs because an increase in these costs reduces the firm’s debt capacity through several inherently related avenues. First, the passage of labor protection laws can lower expected profitability directly through costly litigation and indirectly when a firm uses resources to reduce the likelihood of expensive lawsuits (Autor (2003); Bird and Knopf (2009)). Second, because it is more costly to terminate workers, a firm is less likely to lay off workers during economic downturns, which makes labor costs more rigid in nature and increases the firm’s operating leverage. Lastly, higher employee termination costs also increase financial distress costs and can lead to potential underinvestment if a firm covers cash flow

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<sup>1</sup> Seminal works include Jensen and Meckling (1976), Miller (1977), Bradley, Jarrell, and Kim (1984), Myers (1984), Myers and Majluf (1984), and Jensen (1986).

<sup>2</sup> For example, some authors argue that firms appear underleveraged after considering the costs and benefits of debt (Graham (2000); Korteweg (2010)).

<sup>3</sup> See Chubb Group of Insurance Companies, “U.S. Public Companies’ Perceptions of Risk, and Their Risk Mitigation Strategies,” *Chubb 2012 Public Company Risk Survey*, 2012.

shortfalls by investing less rather than scaling back its labor force. All of these effects are associated with lowering a firm's debt capacity, which should induce the firm to reduce its financial leverage ratios.

To test this hypothesis, I adopt a difference-in-differences research design and exploit the natural experiment created by the passage of state-level wrongful discharge laws over the 1967 to 1995 period as an exogenous increase in a firm's labor adjustment costs. These laws are exceptions to the long-standing doctrine that an employer can terminate employees "at-will," essentially preventing the employer from fully adjusting its labor force in response to the prevailing economic environment. These laws allow employees to sue employers for unjust dismissal, and employees can sue for lost earnings, pain and suffering, and punitive damages. Most importantly, these laws increase the costs associated with dismissing employees. Based on wrongful termination cases that reached the trial stage in 1996, Jung (1997) estimates that plaintiffs prevailed in 46.5% of cases and won \$1.29 million on average. In addition, Bird and Knopf (2009) show that these laws reduce a firm's profitability and increase its labor expenses, and Autor (2003) finds that a firm increases its use of temporary workers who are not protected by these laws. Further, Dertouzos and Karoly (1992) and Autor, Donohue, and Schwab (2006) show that employment levels decrease following the passage of these laws because firms are less willing to employ workers who they cannot easily dismiss. In sum, I argue that the passage of wrongful discharge laws provides an appealing setting for testing how increases in labor adjustment costs impact a firm's capital structure decisions.

To implement the difference-in-differences analysis, I use panel regression techniques that control for firm fixed effects, year fixed effects, several firm characteristics known to impact capital structure decisions, and state GDP growth rates. The inclusion of firm and year fixed effects controls for time-invariant firm-level unobserved factors and for macroeconomic trends. The inclusion of firm fixed effects also implies that the results reflect average, within-firm changes in financial leverage following the passage of these laws. Consequently, to the extent that the passage of wrongful discharge laws are exogenous with respect to the individual firm's financing decisions, my results can be interpreted as a causal effect. The key finding in this paper is that a firm decreases its market and book leverage ratios by 4.9% to 6.4% relative to

their respective sample means following the passage of one particular wrongful discharge law—the good faith exception.<sup>4</sup> This exception in its broadest sense protects employees from termination for any reason other than for a “just cause.”

I next conduct a number of analyses to further alleviate endogeneity concerns and evaluate the extent to which unobserved heterogeneity may bias my results. First, I examine the timing of changes in leverage ratios with respect to the adoption of wrongful discharge laws to test for reverse causality. The tests reveal that changes in leverage appear only after and not before the passage of these laws. This pattern suggests that the relation is not attributable to the passage of these laws simply responding to worsening economic conditions or increases in corporate leverage and supports a causal interpretation of the findings.<sup>5</sup> Further, the result validates the use of a difference-in-differences approach, as it shows that firms located in states that pass and firms located in states that do not pass these laws follow parallel trends before the adoption of wrongful discharge laws.

Second, I further investigate the extent to which omitted variables may drive my findings by controlling for several additional variables that are argued to impact a state’s decision to pass wrongful discharge laws and that could also affect a firm’s capital structure decisions. The results of these analyses show that my findings are robust to the inclusion of state unemployment rates, state unionization rates, the passage of other labor laws, controls for the strength of labor laws in bordering states, and a control for the shift of firms to employ more temporary workers and use less labor-intensive assets. These results suggest that omitted variables related to local economic conditions, changes in the types of workers that a firm employs, or changes in a firm’s operations unlikely drive my findings.

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<sup>4</sup> Wrongful discharge laws ultimately matured into three common law exceptions: the good faith exception, the implied contract exception, and the public policy exception. While some states recognize all three exceptions, others recognize two, one, or none at all. My finding that the passage of the good faith exception has the greatest impact on a firm’s capital structure decisions is consistent with previous studies that argue that the good faith exception is potentially the most far-reaching of the three (Dertouzos and Karoly (1992); Kugler and Saint-Paul (2004)).

<sup>5</sup> To provide further evidence on whether the passage of wrongful discharge laws is exogenous with respect to a firm’s capital structure decisions, I also investigate cited motives for passing these laws. Walsh and Schwarz (1996) show that cited reasons for passing these laws include establishing legally binding principles, assuring consistency with contract principles, and addressing the changing nature of labor relations. Further, Bird and Smythe (2008) find that a state’s decision to adopt these laws is influenced by whether other states that belong to the same federal circuit region have already passed these laws. These reasons appear unrelated to motives for firms reducing leverage and therefore provide further evidence that the passage of these laws likely represents an exogenous shock with respect to firms’ capital structure decisions.

To better understand the economic mechanisms behind my findings, I next conduct several cross-sectional tests to exploit settings where the effect of the passage of wrongful discharge laws on a firm's financial leverage ratios is predictably larger. First, if a firm lowers its debt ratios in response to higher labor adjustment costs arising from the passage of these laws, then the negative relation between the adoption of these laws and its leverage ratios should be especially strong if the firm employs a larger fraction of workers that are more likely protected by these laws or that are more likely to file wrongful termination lawsuits. Wrongful discharge laws are less applicable to temporary workers (Miles (2000); Autor (2003)), and these laws generally pertain to workers not covered by collective bargaining agreements (Miles (2000)). Therefore, the negative relation between the passage of these laws and financial leverage ratios should be stronger for a firm employing a larger percentage of full-time workers and a smaller percentage of unionized workers. Further, workers are more likely to file wrongful termination lawsuits when they have greater annual income and during hard economic times when the unemployment rate is higher. Thus, the negative relation between wrongful discharge laws and debt ratios should also be stronger for a firm whose workers have greater annual wages and for a firm located in a state with higher unemployment rates. Consistent with a causal interpretation of the results, there is a negative relation between the passage of these laws and financial leverage only for firms employing more full-time workers, firms having lower unionization rates and higher paid employees, and firms headquartered in states with higher unemployment rates.

Second, if increases in labor adjustments costs cause a firm to reduce its debt ratios, there should also be a particularly strong relation between the passage of these laws and leverage for a firm that is more likely to dismiss its workers. A firm operating in an industry with a higher layoff propensity rate is more likely to incur costs arising from wrongful termination lawsuits, as the firm is more likely to discharge a greater number of workers annually. Consequently, a firm that has a greater tendency to terminate workers is more likely to consider these labor adjustment costs in its capital structure decisions. Consistent with this prediction, I find a negative relation between the passage of these laws and leverage only for firms operating in industries with higher layoff propensity rates.

Lastly, I examine the effect of constrained access to liquidity on my results. Limited access to liquid assets makes it more difficult for a firm to obtain capital following cash flow shortfalls, which raises the probability that it must resort to cutting costs through layoffs (John, Lang, and Netter (1992); Ofek (1993)). These firms are therefore more likely to incur costs from wrongful termination lawsuits. Thus, the passage of these laws should have a greater impact on the financial policies of firms with limited access to capital. I find evidence consistent with this notion. Specifically, there is a negative relation between the passage of wrongful discharge laws and leverage only for firms with constrained access to liquidity, as measured by lower balances of current assets and working capital and higher default probabilities.

In my final set of analyses, I examine how the passage of wrongful discharge laws affects a firm's cash policies. Specifically, because a firm can hold more cash to reduce the likelihood of resorting to costly layoffs to cover cash flow shortfalls, the optimal amount of cash holdings could be higher following the passage of these laws. I find that a firm increases its cash holdings by 12.9%-13.8% and investors place a higher value on each additional dollar of cash holdings following the adoption of these laws. These results imply that it is optimal for firms to hold more cash to reduce the threat of costly litigation.

The central contribution of this paper is that I provide novel empirical evidence that labor market frictions in the form of labor adjustment costs impact a firm's financing decisions. Broadly, this finding contributes to the vast literature examining the determinants of corporate financing decisions (Titman and Wessels (1988); Rajan and Zingales (1995); Lemmon, Roberts, and Zender (2008)). More specifically, this paper contributes to the growing body of literature investigating how labor market frictions impact capital structure decisions (Matsa (2010); Agrawal and Matsa (2013); Kim (2012)).

In particular, my study compliments work showing that a firm maintains lower debt ratios when its workers face higher unemployment risks (Titman (1984); Berk, Stanton, and Zechner (2010); Agrawal and Matsa (2013)). Higher debt ratios increase the likelihood that a firm will become bankrupt, which raises the probability that workers will be unemployed. Workers recognize this greater risk of unemployment and require higher wages in compensation for bearing such risk. This higher compensation reduces the tax benefits of maintaining higher

debt ratios, resulting in lower optimal financial leverage ratios. Consistent with the passage of wrongful discharge laws, on average, increasing financial distress risk and workers requiring higher wages in compensation for bearing this risk, Bird and Knopf (2009) show that labor expenses increase following the adoption of these laws. Thus, my finding that a firm decreases its financial leverage ratios following the passage of these laws provides additional support for the notion that higher unemployment risk discourages the use of debt financing. Nevertheless and in contrast to these studies, my study examines a unique channel through which increases in labor adjustment costs arising from the passage of specific labor protection laws impact corporate financing decisions.

My paper also supports the findings in contemporaneous work. Simintzi, Vig, and Volpin (2012) examine the effect of country-level employment protection laws on firms' capital structure decisions for a sample of manufacturing firms and find a negative relation between these laws and financial leverage ratios. The legislation that they study forms an index that covers 21 aspects of employment protection and applies to the protection of regular workers against individual dismissal, the regulation of temporary forms of employment, and specific requirements for collective dismissals. My paper differs from their study in several aspects. First, I utilize variation in employee protection laws at the U.S. state level. State-level analyses are less subject to the concern that national-level or state-level trends, such as a changing political economy, differences in access to capital markets, or differences in cultural norms drive both changes in a firm's capital structure decisions and the adoption of employee protection laws. In addition, I study how the passage of individual laws that protect non-temporary and non-unionized workers from unjust dismissal impacts a firm's capital structure decisions. I therefore identify the effect of specific regulations and how particular wrongful termination laws impact a firm's financing decisions.

My findings also contribute to the strand of literature examining the association between operating leverage and both capital structure decisions and financing costs. Kahl, Lunn, and Nilsson (2012) find that greater operating leverage leads to lower debt ratios and higher cash holdings, and Chen, Kacperczyk, and Ortiz-Molina (2011) show a positive relation between operating leverage and firms' cost of equity capital. The passage of wrongful discharge

laws provides a novel setting in which there is an exogenous increase in a firm's fixed cost of labor, which increases the firm's operating leverage. Thus, the finding that firms reduce financial leverage ratios following the passage of these laws also implies that firms respond to increases in operating leverage by using less debt financing.

Lastly, my study relates to work examining how the risk of litigation affects a firm's financing decisions, which currently provides mixed evidence. For example, Arena and Julio (2012) find that a firm facing a greater risk of securities litigation holds more cash to cover anticipated litigation expenses. However, Crane (2011) argues that a firm increases its leverage ratios and decreases its cash holdings following increases in litigation risk to limit the potential payout to litigants. My finding that leverage decreases and cash holdings increase following the passage of wrongful discharge laws is consistent with the results in Arena and Julio (2012) and supports the notion that firms reduce financial risk after increases in litigation risk.

The remainder of the paper is organized as follows. Section I discusses the institutional background on wrongful discharge laws and develops the study's principle hypothesis. Section II describes the data and discusses the empirical methodology used in this study. Section III reports the empirical evidence on how the passage of wrongful discharge laws impacts a firm's capital structure decisions. Section IV reports the results of additional robustness tests and analyses. Lastly, Section V concludes.

## **I. Institutional Background and Hypothesis Development**

### *A. Institutional Background on Wrongful Discharge Laws*

Under the traditional rule in the United States, employers are free to terminate any nonunion employee without the risk of legal liability. Thus, for good reason, bad reason, or no reason at all and with or without prior notice, employers could terminate employees "at-will." However, beginning in the 1970s, states began recognizing exceptions to the terminate at-will rule. These common law exceptions are typically known as wrongful discharge laws. Unlike federal laws aimed at protecting a particular class of workers, such as union members, racial minorities, women, and the aged, these exceptions pertain to workers not already covered by federal legislation or by explicit contractual agreements (Miles (2000)).

There are three widely recognized exceptions to the terminate at-will rule, and states

can choose to adopt none, any, or all three of these exceptions.<sup>6</sup> First, the good faith exception protects employees from termination for “bad cause” and serves to prevent employers from denying employees their contract rights. For example, if an employer fires a salesperson just before a commission is due to deprive the employee of their commission or if an employee is discharged just before her pension vests, the employee can sue the employer under the good faith exception. This exception is potentially the most far-reaching of the three because it can imply that termination must always be for cause (Dertouzos and Karoly (1992); Kugler and Saint-Paul (2004)).

The second exception is the implied contract exception, which protects employees from termination when the employer has implicitly promised the employee not to discharge the worker without good cause. These promises may be oral, or if written in a handbook, they do not need to be negotiated with employees individually. Courts have also determined that employee tenure, a history of promotions or salary raises, general company policies, and typical industry practices can constitute an implied promise to employees of ongoing employment. Firms, however, can largely prevent lawsuits arising from the implied contract exception by including disclaimers in their personal manuals and employees’ handbooks that state that employment contracts are always at-will (Miles (2000); Autor, Kerr, and Kugler (2007)).

Lastly, the public policy exception protects employees from termination for refusing to violate an established public policy or illegal act, such as reporting an employer’s wrongdoing, refusing to commit perjury, filing a worker’s compensation claim, or performing jury duty. The underlying motivation behind the public policy exception is that employees should not be discharged for performing a public service even if the action is not in the employer’s interest. The public policy exception, however, generally does not impose substantial constraints on employer behavior because courts typically limit cases to clear violations of explicit legislative commands rather than violations of a vaguer sense of public obligation (Autor, Kerr, and Kugler (2007)).

Most studies and anecdotal evidence suggests that these laws are costly for firms. In addition to the evidence reported in the introduction, Dertouzo, Holland, and Ebener (1988)

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<sup>6</sup> See Dertouzos and Karoly (1992), Miles (2000), and Autor, Donohue, and Schwab (2006) for a more in-depth discussion of the legal definition and significance of wrongful discharge laws.

analyze jury trials of wrongful discharge claims in California between 1980 and 1986. They find that plaintiffs won in 68% of cases and that the average award was \$0.656 million. Autor, Kerr, and Kugler (2007) show that the adoption of the good faith exception leads to less productive employees. Further, expenses can arise from internal costs of maintaining employment protection or external costs through benefits paid to third parties, such as attorneys (Lazear (1990)).

Other studies, however, show that these laws should have no effect at all, and in certain situations, these laws can be beneficial for firms and employees. Employment protection can act as a transfer of benefits from employer to employee and this protection from discharge is economically equivalent to mandated employee benefits. Under the traditional Coase principal (Coase (1960)), wages will fall to cover the cost of the benefit without productivity or employment consequences, suggesting no effect from the passage of these laws (Autor, Kerr, and Kugler (2007)). Nevertheless, Acharya, Baghai, and Subramanian (2012) show that the passage of the good faith exception leads to more employee innovation because employees become less afraid that employers will terminate them before they are compensated for such innovation. Further, MacLeod and Nakavachara (2007) find that the good faith exception and the implied contract exception result in greater levels of employment for workers in occupations characterized by high levels of investment and skill.

### *B. Labor Adjustment Costs and Capital Structure Decisions*

Debt capacity—the maximum amount of debt financing that a firm can use without lowering firm value or becoming financially distressed—is a key determinant of a firm’s capital structure decisions. A firm’s debt capacity is a function of numerous factors including but not limited to expected profitability or cash flows, financial distress costs, business risks, and liquidation values. Given prior work, I argue that an increase in labor adjustment costs arising from the adoption of wrongful discharge laws lowers a firm’s debt capacity through several of these avenues, which leads to lower debt ratios.

First, a key component that makes labor costly to adjust when dismissal laws protect employees is the lawsuits that arise following the termination of workers. Firms use resources to defend and settle wrongful termination lawsuits, which directly lowers firm profitability.

Further, firms incur indirect costs when they use resources to revise employment handbooks, implement bureaucratic discharge procedures, increase documentation requirements, or simply retain unproductive workers to minimize the direct costs of lawsuits (Autor (2003)). This lower profitability reduces the tax benefits associated with debt financing, resulting in lower debt capacity and firms maintaining lower debt ratios (Ofek (1993); Hanka (1998); Denis and Kruse (2000)).

Second, labor protection laws can increase the costs of financial distress. Because wrongful discharge lawsuits can be very costly, these lawsuits can increase the probability that a firm will become financially distressed and enter bankruptcy. Further, under normal circumstances, when firms become financially distressed and need to cut costs to cover cash flow shortfalls, firms can terminate workers as a cost savings strategy. When labor laws protect employees, however, the costs that a firm bears for terminating the same number of workers is larger, which increases financial distress costs. Similarly, because it is less attractive and more costly to lay off workers to cover cash flow shortfalls, a firm may find alternative sources to lower costs, including forgoing profitable investments. DeAngelo, DeAngelo, and Whited (2011) and Denis and McKeon (2012) show that firms maintain lower debt ratios when there is a greater likelihood of underinvestment under the assumption that firms will use unused debt capacity to finance investment. Thus, greater financial distress costs and concerns for potential underinvestment following negative cash flow shocks can induce firms to maintain lower debt ratios following increases in labor adjustment costs that arise from the passage of labor protection laws.

Lastly, an increase in labor adjustment costs can magnify a firm's operating leverage by raising the firm's fixed costs of conducting business. When it is costlier to dismiss employees, firms are less likely to lay off workers during economic downturns. This effect makes labor costs more fixed in nature, resulting in greater operating leverage. Higher operating leverage ultimately results in more volatile cash flows and therefore lower debt capacity. Consistent with firms lowering financial risk to offset higher operating risk, Van Horne (1974), Mandelker and Rhee (1984), Kahl, Lunn, and Nilsson (2012) show that firms reduce financial leverage in

response to increases in operating leverage. Hence, rising labor adjustment costs can also reduce financial leverage by increasing operating leverage.

In sum, if the passage of these laws reduces a firm's debt capacity by lowering profitability, increasing financial distress costs, or raising operating risks, then following the passage of these laws, firms should lower financial leverage ratios. These arguments lead to the study's principal hypothesis stated in alternative form.

*Hypothesis: An increase in labor adjustment costs arising from the passage of labor protection laws leads to lower financial leverage ratios.*

It is important to acknowledge that there is a strand of literature that could generate the prediction that debt ratios could rise following increases in labor adjustment costs resulting from the adoption of labor protection laws. Specifically, the inability of an employer to terminate a worker at-will shifts bargaining power to the employee, as employees may use the threat of litigation as a bargaining tool to demand higher wages. Prior work shows that firms tend to increase financial leverage to strengthen their bargaining position with labor. Greater leverage reduces the amount of cash available for increasing wages and therefore prevents workers from capturing a greater fraction of firm profits (Bronars and Deere (1991); Matsa (2010)). Thus, if the passage of labor protection laws increases employee bargaining power, firms might raise debt ratios. This effect, however, applies mostly in the context of organized labor, which has the ability to capture firm profits when they have greater bargaining power. Because wrongful discharge laws generally pertain to workers not covered by collective bargaining agreements (Miles (2000)), it is unlikely that this bargaining power argument applies in my empirical setting.

In addition, the hypothesis assumes that firms experience financial losses if they are sued by employees. However, firms can purchase Employment Practices Liability Insurance (EPLI) that protects them against claims or lawsuits filed by employees. There is some evidence that in recent years, a large portion of firms purchase this type of insurance. For example, the 2012 Chubb Group of Insurance Companies survey reports that 68% of firms purchased EPLI. A second study, however, finds that only 50% of respondents carried EPLI coverage in 2012.<sup>7</sup>

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<sup>7</sup> See "2012 Insurance Coverage Survey Results," *Zywave, Inc.*, 2012.

Further, this percentage was substantially lower a decade earlier. For instance, a 1997 survey of employers conducted by the Society for Human Resource Management and Jackson Lewis found that only 22% of respondents purchased EPLI.<sup>8</sup> In sum, while EPLI may serve to decrease the extent of losses of employee lawsuits, not all firms purchase this insurance, especially prior to the year 2000. Further, there are limits to the amount of losses insurance covers, and the premiums paid to purchase this insurance still represents an indirect cost of employment protection laws. Nevertheless, to the extent that insurance coverage reduces the risks and costs associated with employee litigation, the presence of EPLI should only bias me against finding a negative relation between the passage of wrongful discharge laws and firms' financial leverage ratios.

## II. Data and Empirical Methodology

### A. Wrongful Discharge Laws

The identification of the precedent setting court cases that signal that a state has adopted a particular wrongful discharge law is central to my analyses. I base my coding of the passage of wrongful discharge laws on the precedent setting cases provided in Autor, Donohue, and Schwab (2006).<sup>9</sup> They search for the first major appellate-court decision that signals the sustained adoption of a particular employment at-will exception. If a lower court decision adopting the exception is reversed on appeal, then this state is not coded as passing the exception. However, a Supreme Court decision or a lower court decision that is not later reversed is coded as the passage of a particular employment at-will exception. This coding is done for the good faith, implied contract, and public policy exceptions individually. In contrast to Autor, Donohue, and Schwab (2006), I also code Utah as recognizing the good faith exception since 1989, as is done in Dertouzos and Karoly (1992) and Littler (2009). Following recent studies that examine the effect of labor laws on corporate decisions (e.g., Acharya, Baghai, and Subramanian (2012); Agrawal and Matsa (2013)), I match these laws to the state where each

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<sup>8</sup> See "1997 Employment Litigation Survey," *Society for Human Resource Management*, 1997.

<sup>9</sup> Due to the subjectivity in identifying precedent setting cases, in Section IV.A, I examine the robustness of my main findings to using the coding provided by different authors. Specifically, the alternative coding schemes that I analyze include the exact coding by Autor, Donohue, and Schwab (2006), Dertouzos and Karoly (1992), and Morriss (1995). I find very similar results across the various coding schemes.

firm is headquartered.<sup>10</sup> Table I summarizes the dates when each state passed each particular exception. As seen in the table, the passage of all three exceptions displays substantial variation across states and over time. For example, only one, two, and five states had passed the good faith, implied contract, and public policy exceptions in 1975, respectively. By 1995, 13, 43, and 43 states had passed the good faith, implied contract, and public policy exceptions, respectively.

### *B. Sample Selection*

The main sample of companies that I examine in this paper includes 81,162 firm-years for industrial firms (utilities and financial firms are excluded) that have publicly traded stock over the 1967 to 1995 period, are incorporated in the U.S., and have non-missing data for the main variables of interest. I combine state GDP growth rates from the U.S. Bureau of Economic Analysis with financial statement data from the Compustat annual files.

The sample period starts five years before the second earliest enactment of a wrongful discharge law when California passed the implied contract exception in 1972. Data limitations prevent the sample from encompassing the first event when California passed the public policy exception in 1959. The sample period ends five years after Ohio passed the public policy exception in 1990. I select to use this year as my cutoff point rather than extending the analysis to cover the last event when Louisiana passed the good faith exception in 1998 because there are very few additional observations that enter the treatment group (i.e., firms located in states that pass wrongful discharge laws) when Delaware, Louisiana, Mississippi, and Wyoming pass a wrongful discharge law. Specifically, there are only about 1.19% of firms headquartered in these states during these later years. Using the extended sample period may create noise around the identification of the effect that the passage of these laws have on capital structure decisions. Nevertheless, Section IV.B reports the results of tests that examine the robustness of my findings to using alternative sample periods.

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<sup>10</sup> Because employment laws typically apply to the state where the employee is working, firms are assigned to a state on the basis of the firm's headquarters location. If firms have plants located in states different than the firm's headquarters, then those plants would be subject to different employment laws. In addition, Compustat provides only the latest headquarters locations. If firms relocate headquarters to a different state, then these firms would be subject to different employment laws in the earlier periods. Such mismeasurement may attenuate my results. In Section IV.C, I conduct additional robustness tests to investigate the extent to which such measurement error biases my findings. Overall, the results suggest that measurement error does not significantly bias my results.

### C. General Empirical Methodology

I adopt a difference-in-differences research design and use panel regression analysis to examine the relation between the passage of wrongful discharge laws and financial leverage at the firm-year level. I estimate typical leverage regressions and include indicator variables for whether the state where a firm is headquartered has adopted the good faith, implied contract, or public policy exception as of year  $t$  as additional regressors. Specifically, let  $Debt_{ist}$  be a specific measure of financial leverage, such as book leverage, at firm  $i$  in state  $s$  and year  $t$ . I estimate the following regression:

$$Debt_{ist} = a_1(Good\ Faith)_{st} + a_2(Implied\ Contract)_{st} + a_3(Public\ Policy)_{st} + X_{ist}\beta + v_i + \omega_t + \varepsilon_{ist}, \quad (1)$$

where financial leverage is modeled as a function of *Good Faith*, *Implied Contract*, and *Public Policy*, a set of control variables  $X_{ist}$ , firm fixed effects  $v_i$ , and year fixed effects  $\omega_t$ . The control variables include the variables commonly found in leverage regressions (Harris and Raviv (1991); Rajan and Zingales (1995); Frank and Goyal (2007); Lemmon, Roberts, and Zender (2008); Matsa (2010)). These variables include log assets (a control for firm size), the market-to-book ratio (a proxy for growth opportunities), return on assets (a proxy for profitability and the availability of internal funds), the proportion of assets that are fixed (a proxy for potential collateral), cash flow volatility (a proxy for distress risk), an indicator variable for whether the firm paid a common dividend (a proxy for financial constraints), and the modified Altman's z-score (a proxy for the probability of bankruptcy, MacKie-Mason (1990)). I also include the one-year state GDP growth rate as an additional control variable to control for contemporaneous local macroeconomic conditions. Table II presents detailed definitions and summary statistics for these variables. All continuous variables are winsorized at their 1<sup>st</sup> and 99<sup>th</sup> percentiles, and dollar values are expressed in 2009 dollars. For this sample, the average ratio of debt to the book value of assets is 25%. The firm fixed effects control for time-invariant omitted firm characteristics and ensure that estimates for  $a_1$ ,  $a_2$ , and  $a_3$  reflect actual changes in the passage of each wrongful discharge law and the financial leverage measure over time rather than simple cross-sectional correlations. The year fixed effects account for transitory nation-wide factors,

such as macroeconomic conditions, that could possibly affect financial leverage and the likelihood that a state adopts one of the wrongful discharge laws.

To illustrate my identification strategy, it is helpful to consider an example. Suppose I want to estimate the effect of the passage of the good faith exception in California in 1980 on financial leverage. I can subtract the level of leverage before the law was passed from the level of leverage after the law was adopted for firms headquartered in California. However, economy wide shocks may occur at the same time and affect leverage in 1980. To control for such factors, I calculate the same difference in a control state (say New York) that does not pass the good faith exception in 1980. Finally, I calculate the difference of these two differences, which represents the incremental effect of the enactment of the good faith exception on firms headquartered in the treatment state of California compared to firms headquartered in the control state of New York. The same reasoning applies if I want to identify the effect of the implied contract and public policy exceptions.

The tests run in this study are even more stringent than the simple intuition provided above since they control not only for state-wide differences but also for other firm-specific unobservable differences. Another advantage is that different states pass wrongful discharge laws at different times, which allows a firm headquartered in a given state to be both in the treatment (if the state has already passed the particular exception) and the control group (if the state has not yet passed the exception).

I correct estimated standard errors in all regressions for heteroskedasticity and clustering at the state level to control for serial correlation. Given that the variation in wrongful discharge laws is at the state level, this clustering method accounts for potential time-varying correlations in unobserved factors that affect different firms within the same state (Bertrand, Duflo, and Mullainathan (2004)). This methodology also corrects for within-firm error term correlations over time and is therefore more general than firm-level clustering.<sup>11</sup>

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<sup>11</sup> Because I cluster standard errors at the state level, the critical t values (two-tailed with 49 degrees of freedom) for significance at the 10%, 5%, and 1% levels are 1.68, 2.01, and 2.68, respectively.

### III. Empirical Results

#### A. Wrongful Discharge Laws and Financial Leverage

I first investigate whether changes in labor adjustment costs that arise from the passage of wrongful discharge laws impact a firm's capital structure decisions. If the passage of these laws reduces a firm's debt capacity, then following the passage of these laws, firms should reduce financial leverage ratios.

Table III reports the results of this analysis. In Panel A, the dependent variable is total debt divided by book value of assets (*Book Leverage*). I use book leverage as my primary measure of financial leverage because many managers likely focus on book leverage rather than market leverage when making capital structure decisions (Graham and Harvey (2002)). Further, Welch (2004) shows that a substantial portion of the variation in market leverage ratios stems from variation in firms' market values rather than changes in debt policies. Nevertheless, in all analyses, I also report the results using market leverage, as market leverage is more closely tied to theoretical predictions relating to target leverage levels. Models 1-3 examine the effect of the passage of the good faith, implied contract, and public policy exceptions on book leverage individually without controlling for the passage of the other two exceptions. Model 4 includes the passage of all three exceptions in the same regression. The results in Models 1-4 show a negative and statistically significant relation between book leverage and only the passage of the good faith exception. In terms of economic significance, the coefficient estimates in Model 4 imply the firms reduce their book leverage ratios by 1.6 cents of debt per dollar of book assets following the passage of the good faith exception to the employment at-will rule. Given that the sample mean of book leverage is 25.0%, this finding represents a reduction in book leverage of 6.4% ( $=0.016/0.250$ ). The finding that firms only lower their reliance on debt financing following the adoption of the good faith exception is consistent with previous studies that argue that this exception is potentially the most far-reaching of the three and will therefore have the greatest impact on corporate policies (Dertouzos and Karoly (1992); Kugler and Saint-Paul (2004)). As such, for the remaining analyses, I focus my analyses on the effect of the passage of the good faith exception on financial leverage and treat the adoption of the implied contract and public policy exceptions as additional control variables.

The coefficients on the other control variables used in the models in Table III are mostly consistent with previous findings in the literature. Larger firms use more leverage, and firms with more growth opportunities use less leverage. Firms with more fixed assets and hence more collateral use more leverage. Finally, firms that are not financially constrained and firms that are financially distressed use less leverage.<sup>12</sup>

Panel B examines the robustness of these findings to defining the dependent variable as the book value of long-term debt plus debt in current liabilities divided by market value of assets (*Market Leverage*). Consistent with the findings using book leverage as the dependent variable, the results in Panel B show that firms reduce market leverage only following the passage of the good faith exception to the employment at-will rule. Given that the sample mean of market leverage is 28.6%, the coefficient estimates in Model 4 of Panel B imply a reduction in market leverage of 4.9% ( $=0.014/0.286$ ). Overall, the results in Table III support the notion that increases in labor adjustment costs arising from the passage of labor protection laws reduce a firm's debt capacity, which results in lower financial leverage ratios.

### *B. Endogeneity of Wrongful Discharge Laws*

Although the passage of wrongful discharge laws appears to represent an exogenous event with respect to firms' capital structure decisions, I next perform a number of analyses to evaluate the extent to which the passage of these laws is indeed exogenous.

#### *B.1. The Timing of Capital Structure Changes*

As discussed earlier, cited reasons for passing wrongful discharge laws suggest that the enactment of these laws represents an exogenous event with respect to capital structure decisions. Nevertheless, following Bertrand and Mullainathan (2003), I conduct an additional test to further alleviate potential endogeneity concerns. When workers do not have protection from unjust dismissal, they may have fewer incentives to invest their human capital with the

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<sup>12</sup> In contrast to prior findings, I document that more profitable firms have higher debt levels. This result is due to the inclusion of the modified z-score in the model because a measure of profitability is used in the calculation of this variable. When I exclude the modified z-score from the models, the sign on the coefficient on return on assets becomes negative and statistically significant, which is consistent with previous findings. Nevertheless, OLS estimates are unbiased in the presence of multicollinearity (Kennedy (2008)). Further, because profitability is not my variable of interest, I choose to follow recent literature examining the effect of labor market frictions on financial leverage and include the modified z-score in all of my models (Matsa (2010); Agrawal and Matsa (2013)).

firm (Acharya, Baghai, and Subramanian (2012)), which could result in lower future debt capacity. In this scenario, my results may be subject to reverse causality if firms that notice a decline in debt capacity lobby for the passage of wrongful discharge laws to incentivize workers to invest their human capital with the firm. If reverse causality is an issue, then there would be a trend of declining financial leverage before the enactment of these laws. Further, if a trend exists before the passage of wrongful discharge laws, this finding would cast doubt on the validity of using a difference-in-differences approach because it would suggest a violation of the parallel trends assumptions.<sup>13</sup>

Table IV presents the results of this analysis. The dependent variable in Model 1 is book leverage, and the dependent variable in Model 2 is market leverage. To check for pre-existing trends in financial leverage, instead of including a variable for whether the state where a firm is headquartered has adopted the good faith exception as of year  $t$ , Models 1 and 2 include the following variables. *Good Faith*<sup>-1</sup> is an indicator variable set to one if the firm is headquartered in a state that will pass the good faith exception in one year. *Good Faith*<sup>0</sup> is an indicator variable set to one if the firm is headquartered in a state that passes the good faith exception this year. *Good Faith*<sup>1</sup> is an indicator variable set to one if the firm is headquartered in a state that passed the good faith exception one year ago. *Good Faith*<sup>2+</sup> is an indicator variable set to one if the firm is headquartered in a state that passed the good faith exception two or more years ago.<sup>14</sup> The coefficient on the dummy variable *Good Faith*<sup>-1</sup> is especially important because its significance and magnitude would suggest if there is any relation between financial leverage and the good faith exception before the enactment of this law. Specifically, a negative and statistically significant coefficient would indicate that the decline in leverage preceded the law, which would cast doubt on the exogeneity of the passage of wrongful discharge laws.

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<sup>13</sup> The “parallel trends” condition in my empirical setting means that in the absence of treatment (the passage of wrongful discharge laws), the average change in financial leverage ratios would be the same for both the treatment group (firms headquartered in states that have passed wrongful discharge laws) and the control group (firms headquartered in states that have not passed wrongful discharge laws). If the treatment and control groups follow different trends before the adoption of these laws, then inferences are generally inconclusive. Specifically, the estimated effect of the passage of wrongful discharge laws is biased in an unknown direction.

<sup>14</sup> There are two instances in which a state reversed its previous passage of the good faith exception. These reversals include: (1) New Hampshire reversing the passage of the good faith exception in 1980 and (2) Oklahoma reversing the passage of the good faith exception in 1989. To account for these reversals, I drop all observations for these two states after the date of the reversal. This reduces the sample size from 81,162 observations to 80,636 observations.

The results in Model 1 of Table IV imply that there is no trend of declining book leverage before the enactment of the good faith exception. The coefficient on *Good Faith*<sup>-1</sup> is small and statistically insignificant. The coefficient on *Good Faith*<sup>0</sup> is also small and statistically insignificant. The coefficients on *Good Faith*<sup>1</sup> and *Good Faith*<sup>2+</sup> are about three times as large as the coefficient on *Good Faith*<sup>0</sup>, which strongly suggests that book leverage declined only after the enactment of the good faith exception. Further, because the coefficient on *Good Faith*<sup>2+</sup> is similar in magnitude and statistical significance as *Good Faith*<sup>1</sup>, this finding suggests that the passage of the good faith exception permanently reduces a firm's use of financial leverage. This test examines the effect of the passage of wrongful discharge laws on leverage during a particular year. As such, the results may be noisier and more sensitive when using market leverage as the dependent variable, as a significant portion of the change in market leverage may reflect changes in the market value of the firm and not changing debt policies. Nevertheless, the results in Model 2 using market leverage as the dependent variable are similar to the results in Model 1. However, the significant coefficient on only *Good Faith*<sup>2+</sup> implies that market leverage does not decline until two years after the passage of the good faith exception. Overall, the finding in Table IV that debt ratios decline only after the enactment of the good faith exception and not before suggests that the relation does not suffer from reverse causality. Further, the result confirms the use of a difference-in-differences approach, as it shows that firms located in states that pass and firms located in states that do not pass these laws follow parallel trends before the adoption of wrongful discharge laws.

### *B.2. The Effect of Potential Omitted Variables*

Another possible alternative explanation for my findings is that unobservable local economic conditions, changes in the types of workers that a firm employs, or changes in a firm's operations lead to states passing wrongful discharge laws and a firm using less financial leverage in its capital structure. In this scenario, the relation between wrongful discharge laws and financial leverage may be spurious. I explore the empirical relevance of this hypothesis in several ways and find evidence suggesting that this explanation is unlikely.

First, I include state-level variables that are argued to impact a state's decision to pass wrongful discharge laws and that could influence a firm's capital structure decisions. Second, I

include variables to control for the changing nature of a firm's labor force and operations that could result from the passage of these laws and that could also affect the firm's debt policies. Table V presents the results of this analysis. The dependent variable in Panel A is book leverage, and the dependent variable in Panel B is market leverage. Overall, the results in Table V show that the finding that firms reduce leverage following the passage of the good faith exception is robust to the inclusion of these additional control variables.

Dertouzos and Karoly (1992) argue that legislators are more likely to pass these laws when the unemployment rate in the state is higher because there is a larger fraction of workers that could have benefited from employment protection. Thus, Model 1 includes the state-level unemployment rate as an additional control variable. I define the unemployment rate as the fraction of workers within a state that are in the labor force but are unemployed. The unemployment rate is based on data from the Current Population Survey (CPS) each year. Data are from the Integrated Public Use Microdata Series (IPUMS)-CPS database. For missing state-years (early 1970s and late 1960s for a few states), this measure is supplemented with data from the IPUMS-USA database.<sup>15</sup> The results show that my finding that firms decrease leverage following the passage of the good faith exception is robust to controlling for state-level unemployment rates. In addition, the negative relation between state-level unemployment rates and leverage can be interpreted as consistent with the finding in Agrawal and Matsa (2013) that leverage is negatively associated with worker unemployment risk. Specifically, higher unemployment rates imply that it is more difficult for unemployed employees to find work, which also suggests higher unemployment risk.

Further, fewer employees may elect representation by unions following the adoption of wrongful discharge laws because the protection of nonunionized workers increases relative to the protection provided by unions. Matsa (2010) shows that firms use more financial leverage in

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<sup>15</sup> The IPUMS-CPS database compiles data from the March Current Population Survey (CPS) each year since 1962. The CPS is a monthly U.S. household survey conducted jointly by the U.S. Census Bureau and the Bureau of Labor Statistics. The March survey covers additional topics compared to the surveys conducted in other months and is therefore the most widely used. The IPUMS-USA database compiles data from the American population federal censuses every ten years. For the census years 1980 and 1990, I use the 1-in-20 national random sample of the population. For the year 1970, I use the 1-in-100 national random sample of the population. Since my sample ranges from 1967 to 1995 and census years are available for 1970, 1980, and 1990, I assume that the values from the 1970, 1980, and 1990 censuses are valid for the 1967–1975, 1976–1985, and 1986–1995 periods, respectively.

the presence of organized labor. Consequently, decreases in debt ratios following the passage these laws could reflect lower union membership rather than higher labor adjustment costs. In addition, states with right-to-work laws are considered less labor friendly and are therefore less likely to adopt labor protection laws and more likely to have firms with lower leverage ratios (Dertouzos and Karoly (1992); Matsa (2010)). Thus, Model 2 includes state-level union membership and an indicator variable for whether the state where the firm is headquartered has passed right-to-work laws as of year  $t$  as additional control variables. State-level union membership is the fraction of each state's nonagricultural wage and salary employees who are covered by a collective bargaining agreement.<sup>16</sup> The results in Model 2 continue to imply that firms decrease leverage following the passage of the good faith exception, and the coefficients on the other two variables are statistically insignificant. This finding suggests that changes in union membership do not drive my findings.

Dertouzos and Karoly (1992) and Bird and Smythe (2008) also argue that a state's decision to adopt wrongful discharge laws is influenced by whether neighboring states and states that belong to the same federal circuit region have already passed these laws. Thus, to control for the influence of the strength of labor protection laws in neighboring states, Model 3 also includes variables that measure the fraction of bordering states that have passed the good faith, implied contract, and the public policy exceptions by year  $t$  as additional regressors.<sup>17</sup> The results in Model 3 continue to show that firms use less debt financing following the adoption of the good faith exception. This result suggests that omitted variables related to the influence of the strength of labor protection laws in neighboring states do not drive my findings.

Lastly, Autor (2003) finds that firms increasingly use temporary workers following the passage of these laws to reduce their exposure to litigation, as these laws do not generally protect temporary workers. Thus, to control for the influence of a changing labor force, Model 4 further controls for the fraction of a firm's workers that are full-time employees. I approximate a firm's fraction of full-time workers by the fraction of employees that work at least 40 hours per

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<sup>16</sup> Data on state union membership are from Hirsch, Macpherson, and Vroman (2001) and is available online at <http://www.unionstats.com>. Data on the passage of right-to-work laws are from the Department of Labor and is available at <http://www.dol.gov/whd/state/righttowork.htm>.

<sup>17</sup> Because Alaska and Hawaii do not have any bordering states, in Models 3 and 4, I drop all observations for which firms are headquartered in these two states. This restriction reduces the sample size from 81,162 observations to 81,007 observations.

week in the firm's 3-digit North American Industry Classification System (NAICS) industry within its headquarters state. I obtain worker hours from the IPUMS-USA database. Autor, Kerr, and Kugler (2007) also show that following the passage of wrongful discharge laws, firms shift from relatively more expensive labor inputs to less labor-intensive capital investments. Thus, to control for this changing nature of a firm's operations, Model 4 also includes the firm's labor-to-assets ratio. This ratio is the number of employees to the real book value of assets, where book values of assets are converted into 2009 dollars. The results in Model 4 continue to show that firms decrease debt ratios following the passage of the good faith exception, suggesting that shifts to employing more temporary workers or to using less labor-intensive assets do not drive my findings. Overall, the results in Table V are inconsistent with the alternative explanation that omitted variables related to local economic conditions, changes in the types of workers that a firm employs, or changes in the firm's operations explain my findings.

### *C. Cross-Sectional Tests of Wrongful Discharge Laws and Financial Leverage*

I next estimate heterogeneities in my main findings across a number of dimensions, such as instances when a firm's employees are more likely protected by wrongful discharge laws, when workers are more likely to sue the firm, and when a firm is more likely to discharge workers. In addition to shedding light on the economic mechanisms behind the main results, these tests further alleviate endogeneity concerns and in particular the concern that an omitted variable drives my findings. For an omitted variable to explain my results, in addition to being uncorrelated with the controls for local economic conditions and firm characteristics, the omitted variable would also have to be correlated with all the various characteristics for which there is a particularly strong relation between the passage of wrongful discharge laws and firms' financial leverage ratios.

#### *C.1. The Effect of Labor Market Characteristics*

If firms lower debt ratios in response to higher labor adjustment costs arising from the passage of wrongful discharge laws, then the negative relation between the adoption of these laws and firms' leverage ratios should be especially strong for firms whose workers are more

likely protected by these laws and for firms whose workers are more likely to file wrongful termination lawsuits. To test this prediction, I start by dividing firms based on the fraction of the firm's 3-digit NAICS industry's workers within a state that are employed full-time as a proxy for the fraction of a firm's workers that are employed full-time. Firms with more full-time workers are more likely to incur increases in labor adjustment costs due the passage of wrongful discharge laws, as these laws are less applicable to temporary workers (Miles (2000); Autor (2003)).

In addition, Dertouzos, Holland, and Ebener (1988) find that plaintiffs in wrongful discharge cases typically earn considerably higher wages. Autor, Donohue, and Schwab (2006) also argue that because damage awards tend to be roughly proportional to prior earnings, high-wage workers have a greater incentive to litigate, and attorneys working on a contingency basis have a greater incentive to take their cases. Thus, I also divide the sample based on average worker income to capture the extent to which employees are more likely to file wrongful termination lawsuits. I approximate the average income of a firm's employees using the mean wage of employees in the firm's 3-digit NAICS industry within its headquarters state. I obtain worker wages from the IPUMS-USA database.

Further, anecdotal evidence suggests that in hard economic times when the unemployment rate is high, workers are substantially more likely to file wrongful termination lawsuits, as the unemployed burn through their savings and run up debt.<sup>18</sup> Thus, I also split the sample based on the unemployment rate in a firm's headquarters state during a given year. Lastly, I divide the sample based on the likelihood that a firm's employees are covered by a collective bargaining agreement. The motivation behind this sample split is that these laws generally pertain to workers not covered by collective bargaining agreements and are therefore less likely to affect firms whose employees are represented by labor unions (Miles (2000)). To proxy for a firm's unionization rate, I use the unionization rate of the state where the firm is headquartered. However, because state unionization rates are a noisy proxy for a firm's or

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<sup>18</sup> See Carol J. Williams, "As Corporate Layoffs Rise, Legal Challenges are Likely to Follow," *Los Angeles Times*, December 22, 2008. The article notes that due to the recent financial crisis, labor and employment lawyers warn that a tidal wave of wrongful termination lawsuits are expected in the coming months, as the jobless burn through their savings, run up debt, and find few work prospects in the worst economic downturn in decades. Attorneys specializing in labor law say that they have not been this busy since the late 1980s, as strapped corporate clients seek their counsel on how to reduce staff without inviting litigation.

industry's unionization rate, I further limit the sample to only those industries with an above median fraction of workers in blue collar occupations. This additional restriction limits the sample to those industries most likely to have unions, as labor unions largely represent blue collar workers (Farber (1983)).

I separately estimate the impact of the passage of wrongful discharge laws on debt ratios for firms with above and below sample median values of the previously discussed measures. Table VI presents the results of this analysis. In Panel A, the dependent variable is book leverage. The dependent variable in Panel B is market leverage. The results show a negative relation between the passage of the good faith exception and financial leverage only for firms whose workers are more likely protected by such laws and in instances when employees are more likely to file wrongful termination claims against their employers. For the samples used in the regressions in Models 1, 3, 5, and 7, the mean firm has book leverage of 24.0%, 23.8%, 24.4%, and 25.1% respectively. Given these values, the coefficient estimates in Models 1, 3, 5, and 7 of Panel A suggest that firms whose workers are more likely protected by these laws and whose employees are more likely to file wrongful termination claims reduce book leverage by 10.8% ( $=0.024/0.240$ ), 10.9% ( $=0.026/0.238$ ), 8.2% ( $=0.020/0.244$ ), and 18.3% ( $=0.046/0.251$ ) following the passage of the good faith exception, respectively. Overall, the results in Table VI further strengthen my conclusion that labor adjustment costs reduce a firm's debt capacity, causing firms to use less financial leverage.

### *C.2. The Effect of Layoff Propensity Rates*

The relation between the passage of the good faith exception and financial leverage should, according to my hypothesis, also be stronger for firms that are more likely to dismiss workers. Firms that have a greater tendency to dismiss workers are more likely subject to wrongful termination lawsuits and are therefore more likely to consider these labor adjustment costs in their capital structure decisions. To test this prediction, I divide firms based on the firm's propensity to lay off workers. I create two measures for a firm's lay off propensity rate. First, I approximate a firm's layoff propensity rate by the fraction of the firm's 3-digit NAICS

industry that reduces its number of employees during a fiscal year by at least 5%.<sup>19</sup> I average this measure over the previous ten years to determine the firm's layoff propensity rate. Second, I use the layoff propensity measure provided in Agrawal and Matsa (2013). Their measure is based on the average annual fraction of workers separated from work as part of a mass layoff. The measure uses data from the U.S. Bureau of Labor Statistics' (BLS) "Mass Layoff Statistics" and the U.S. Bureau of Economic Analysis (BEA) and is based on 3-digit NAICS industries over all of the years when the data are available (1996–2008).<sup>20</sup> I then use this variable as a single industry measure for the entire sample period from 1967 to 1995.

I separately estimate the impact of the passage of wrongful discharge laws for firms with above and below sample median layoff propensity rates. Table VII presents the results of this analysis. The dependent variable in Panel A is book leverage, and the dependent variable in Panel B is market leverage. The results show a negative relation between the passage of the good faith exception and financial leverage only for firms that face an above median layoff propensity rate. For the samples used in the regressions in Models 1 and 3, the mean firm has book leverage of 24.6% and 24.4%, respectively. Given these values, the coefficient estimates in Models 1 and 3 of Panel A suggest that following the passage of the good faith exception, firms with higher layoff propensity rates reduce book leverage by 14.6% ( $=0.036/0.246$ ) and 10.7% ( $=0.026/0.244$ ), respectively. In sum, the results in Table VII suggest that firms that are more likely to frequently lay off workers are more likely to take into account labor adjustment costs when making capital structure decisions, as labor adjustment costs are greater for these firms.

### *C.3. The Effect of Asset Liquidity*

If firms lower debt ratios in response to higher labor adjustment costs arising from the

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<sup>19</sup> I calculate layoffs as the change in the number of employees reported by a firm using data from Compustat. As such, a decrease in the number of employees does not necessarily represent employee layoffs. I would also observe a decrease in the number of employees if a firm sells a division. If the selling of a division does not result in a greater likelihood of employee layoffs and wrongful termination lawsuits, then this measure would be a noisy proxy for the firm's layoff propensity rate and the increase in labor adjustment costs that these firms face. Such mismeasurement may attenuate my results.

<sup>20</sup> Agrawal and Matsa (2013) count the number of workers who are separated from their jobs during extended mass layoffs, which is defined by the BLS as when at least 50 initial claims for unemployment insurance are filed against an establishment during a consecutive 5-week period and at least 50 workers have been separated from their jobs for more than 30 days. For each industry-year, they take the ratio of such separations to total industry employment (from the BEA) and then obtain the industry layoff separation rate by taking the simple average of these ratios over the full sample period.

passage of wrongful discharge laws, then the negative relation between the adoption of these laws and firms' leverage ratios should also be especially strong for firms with limited access to liquidity. Constrained access to liquidity makes it more difficult for firms to obtain capital needed to service debt payments when there are negative economic and cash flow shocks. This type of constraint raises the probability that such firms must resort to cutting costs through layoffs (John, Lang, and Netter (1992); Ofek (1993)). Thus, these firms are more likely to incur direct and indirect costs arising from wrongful termination lawsuits and are therefore more likely to consider labor adjustment costs in their capital structure decisions.

To examine whether my findings vary based on a firm's access to liquidity, I start by classifying firms with limited access to capital by the ratio of their current assets to total book assets. Firms with a larger fraction of current assets have a greater ability to convert assets into cash that can be used to service debt payments and avoid discharging workers.<sup>21</sup> Although the amount of current assets measures a firm's ability to convert liquid assets into cash, it does not capture the extent to which these assets provide additional liquidity after servicing short-term liabilities. To account for this issue, I also divide the sample into firms based on the ratio of their working capital (current assets less current liabilities) to total book assets, as firms with lower working capital balances have fewer liquid assets after paying short-term financial obligations that could be used to cover unexpected cash flow shortfalls (Opler, Pinkowitz, Stulz, and Williamson (1999)). As such, firms with lower balances of working capital are more likely to dismiss workers as a cost savings strategy. Lastly, I compare firms with lower modified Altman z-scores to firms with higher modified Altman z-scores because it is more difficult for firms with greater default probabilities (low z-scores) to raise external financing, and they also have lower levels of liquidity (Kim, Mauer, and Sherman (1998); Daniel, Denis, and Naveen (2010)).

For each asset liquidity measure, I separately estimate the effect of the adoption of wrongful discharge laws on financial leverage ratios for firms with above and below sample median values of the particular measure. Table VIII presents the results of this analysis. The

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<sup>21</sup> Different types of current assets have varying degrees of liquidity, with the most liquid current asset being cash and short-term investments. In untabulated analyses, I also split the sample based on the ratio of cash and short-term investments to total assets and find similar results. Specifically, there is only a negative and statistically significant relation between the passage of the good faith exception and firms' debt ratios for firms with cash holdings below the sample median.

dependent variable in Panel A is book leverage, and the dependent variable in Panel B is market leverage. The results show a negative and statistically significant relation between the passage of the good faith exception and financial leverage only for firms with constrained access to liquidity. For the samples used in the regressions in Models 1, 3, and 5, the mean firm has book leverage of 29.7%, 31.9%, and 31.2%, respectively. Given these values, the coefficient estimates in Models 1, 3, and 5 of Panel A suggest that firms with limited access to liquidity reduce book leverage by 7.7% ( $=0.023/0.297$ ), 7.2% ( $=0.023/0.319$ ), and 7.7% ( $=0.024/0.312$ ) following the passage of the good faith exception, respectively. Overall, the results in Table VIII suggest that firms that face limited access to capital are more likely to take into account labor adjustment costs when making capital structure decisions, as these firms are more likely to resort to costly layoffs to cover cash flow shortfalls. These results provide additional evidence that labor adjustment costs reduce a firm's debt capacity, causing firms to use less financial leverage.

#### **IV. Additional Robustness Tests and Analyses**

##### *A. Robustness to Dating Schemes for the Enactment of Wrongful Discharge Laws*

There is some subjectivity in determining which court cases set the precedent that a state has adopted a particular wrongful discharge law. This subjectivity results in various authors and studies using different dates for the passage of each exception to the employment at-will rule. For my analyses, I use the coding provided by Autor, Donohue, and Schwab (2006) with the exception that I also recognize Utah as passing the good faith exception in 1989. This section examines the robustness of my main finding that leverage decreases following the adoption of the good faith exception to using dating schemes and precedent setting cases provided in other studies. The alternative coding schemes that I analyze include the exact coding by Autor, Donohue, and Schwab (2006), Dertouzos and Karoly (1992), and Morriss (1995).

Table IX presents the results of this analysis. The dependent variable in Panel A is book leverage, and the dependent variable in Panel B is market leverage. The results show that the negative relation between financial leverage and the passage of the good faith exception is robust to using alternative dating schemes. Models 1-3 examine the robustness of my findings

to using alternative coding schemes over the 1967 to 1995 period to be consistent with my previous analyses. However, because Dertouzos and Karoly (1992) and Morriss (1995) are earlier studies, they do not consider Delaware as passing the good faith exception and the implied contact exception in 1992 or Wyoming as adopting the good faith exception in 1994. To account for this issue, I assume that these two studies would have coded these three events the same as Autor, Donohue, and Schwab (2006). These authors, however, may not have adopted the same coding as Autor, Donohue, and Schwab (2006) for these three events. Thus, Models 4-6 restrict the sample period to the years 1967 to 1991 so that these three events do not enter into my sample period. The results are robust to this restriction. Overall, the results in Table IX suggest that my main finding that firms decrease leverage in response to increases in labor adjustment costs arising from the passage of the good faith exception is not specific to the particular methodology that I follow to date precedent setting cases.

#### *B. Robustness to Alternative Measures of Financial Leverage and Sample Periods*

I also examine the robustness of my main findings to using alternative definitions to measure financial leverage and to using alternative sample periods. Table X presents the results of this analysis. The results show that the negative relation between the passage of the good faith exception and firms' debt ratios is robust to both alternative definitions for financial leverage and to the sample period considered. First, it is often argued that cash acts like negative debt. Since firms can lower net leverage (debt less cash) by reducing debt or increasing cash holdings, Lambrecht and Pawlina (2012) and Kahl, Lunn, and Nilsson (2012) suggest that measuring financial leverage as net leverage provides greater insights into how firms make capital structure decisions. I account for this by using total debt less cash and short-term investments divided by book value of assets (*Net Book Leverage*) as the dependent variable in Model 1 and total debt less cash and short-term investments divided by market value of assets (*Net Market Leverage*) as the dependent variable in Model 2.

Second, research suggests that ignoring operating lease commitments when calculating leverage ratios potentially understates a firm's true degree of leverage (Eisfeldt and Rampini (2009); Rauh and Sufi (2012)). Thus, I use debt plus the value of leases divided by book value of assets plus the value of leases (*Book Leverage with Leases*) as the dependent variable in Model 3

and debt plus the value of leases divided by market value of assets plus the value of leases (*Market Leverage with Leases*) as the dependent variable in Model 4. To calculate the value of leases, I follow Rampini and Viswanathan (2013) and capitalize annual rental expenses at a 10% discount rate for all firms. The results are also robust to using capitalization rates of 8% and 12%. Overall, the results in Models 1-4 show that my finding that firms decrease leverage following the passage of the good faith exception is robust to measuring leverage net of cash and considering the value of leases in the leverage calculation.

As discussed in the sample selection section, my sample period ends before the last documented passage of the good faith exception in Louisiana in 1998. To examine whether ending the sample period earlier affects my results, Models 5 and 6 rerun the main regressions using book and market leverage as the dependent variables but extend the sample period to five years after the last event to 2003. As an additional robustness check, I also restrict the sample period to that used in Autor, Donohue, and Schwab (2006). Specifically, Models 7 and 8 rerun the main regressions using book and market leverage as the dependent variables over the sample period 1978 to 1999. The results in Models 5-8 show that the negative relation between the adoption of the good faith exception and firms' debt ratios is not conditional on the sample period over which I run my analyses. Overall, the results in Table X suggest that my finding that firms decrease leverage following the passage of the good faith exception is robust to both alternative definitions for financial leverage and to the sample period considered.

### *C. Other Robustness Tests of Main Specification*

There is a potential drawback of using the passage of wrongful discharge laws in the state where firms are headquartered as an exogenous source of variation in their labor adjustment costs. Specifically, this methodology assumes that a majority of a firm's employees work in its headquarters state. However, to the extent that a firm has operations in multiple states or countries, the passage of wrongful discharge laws in its headquarters location may imprecisely measure its increase in labor adjustment costs. In addition, because Compustat only provides the most current headquarters location, I am unable to identify if and when a firm moves its headquarters to a different state. Although such mismeasurement should only bias me against finding a negative relation between the passage of these laws and firms' financial

leverage ratios, I next conduct additional robustness tests to investigate the extent to which such measurement error of a firm's exposure to increases in labor adjustment costs biases my findings.

Table XI presents the results of this analysis. I first address the concern that for a firm with operations in multiple states or countries, the passage of wrongful discharge laws in its headquarters location is a noisy measure of its overall increase in labor adjustment costs. To address this potential issue, Model 1 excludes observations when a firm has operations in other countries by excluding observations when a firm reports positive foreign income or positive foreign taxes. Similarly, Model 2 excludes all firms in industries in which a large percentage of the workforce is likely geographically dispersed. Dispersed industries include retail, wholesale, and transportation (Agrawal and Matsa (2013)). Overall, the results in Models 1 and 2 continue to show that the negative relation between the passage of the good faith exceptions and firms' debt ratios is robust to excluding firms with operations in multiple states or countries. This finding suggests that measurement error of a firm's exposure to increases in labor adjustment costs due to geographically dispersed operations does not significantly bias my findings.

I next address the concern that firms may have switched headquarters locations during the sample period. To address this potential concern and the extent to which it biases my findings, I first identify the firms in my sample that switched headquarters locations during the years when I have actual headquarters data from 10-K reports. I extract the actual state where each firm is headquartered from 10-K filings using the programming language PHP. I am able to obtain this data for most firms between 1996 and 2011 and for some firms as early as 1992. I have the actual headquarters state data for 4,852 unique firms. Of these firms, 667 (13.7%) switch their headquarters state at least once. Model 3 eliminates all observations for firms that have moved their headquarters to a different state at least once over the 1992 to 2011 period. The results continue to show a negative relation between the passage of the good faith exception and firm's financial leverage ratios.

Since this sample restriction only accounts for firms that have switched headquarters locations over the 1992 to 2011 period, I next follow an approach similar to that in Amore, Schneider, and Žaldokas (2013). For firm-years when I am unable to collect actual headquarters

data from 10-K filings, I compute each firm's one-year asset and sales growth rates. In addition to excluding observations for firms that have moved their headquarters to a different state at least once over the 1992 to 2011 period, I also exclude observations for a firm if it has ever had one-year sales or asset growth exceeding 100% in the years when 10-K data is unavailable in Model 4. The motivation for this exclusion relies on the findings in Pirinsky and Wang (2006) who argue that mergers and acquisitions drive most headquarter changes. They only find 118 relocations from a sample of more than 4,000 firms during the 1992–1997 period after excluding merger and acquisition events and other major restructuring events. Because large increases in sales or assets are typically associated with mergers, restructurings, and other major corporate events (Almeida, Campello, and Weisbach (2004)), the exclusion of firms with such growth exceeding 100% eliminates firms experiencing events that may initiate changes in their headquarters locations. The results in Model 4 show that the negative relation between the passage of the good faith exception and firms' debt ratios is robust to this exclusion and suggests that firms switching headquarters locations unlikely biases my findings.

Lastly, Model 5 addresses the potential concern that my findings may suffer from survivorship biases. In particular, if firms with high debt ratios went bankrupt due to lawsuits related to violations of wrongful discharge laws after their passage, there would be a mechanical decrease in average leverage ratios following the passage of these laws. To account for potential survivorship biases, Model 5 restricts the sample to only firms that survived and have Compustat data available for every year over the 1967 to 1995 period. This restriction reduces the sample size to 9,512 firm-year observations consisting of 328 firms. After controlling for survivorship bias and given that this sample's mean of book leverage is 23.6%, the coefficient estimates in Model 5 suggest that firms reduce book leverage by 18.2% ( $=0.043/0.236$ ) following the passage of the good faith exception. Overall, this finding suggests that survivorship biases do not drive my findings.

#### *D. Wrongful Discharge Laws and Cash Policies*

In this last set of analyses, I examine whether changes in labor adjustment costs that arise from the passage of wrongful discharge laws also impact a firm's cash policies. Firms can hold more cash that can be used to cover cash flow shortfalls and reduce their risk of becoming

financially distressed (Acharya, Almeida, and Campello (2007)). Thus, following increases in labor adjustment costs arising from passage of these laws, firms may also hold more cash to reduce the likelihood of resorting to costly layoffs to cover cash flow shortfalls. Table XII presents the results of this analysis. The dependent variable in Model 1 is the natural logarithm of the book value of cash and short-term investments divided by the book value of assets (*Log Cash Holdings*). The dependent variable in Model 2 is the natural logarithm of the book value of cash and short-term investments divided by the book value of assets less the book value of cash and short-term investments (*Log Net Cash Holdings*). I include the set of control variables used in Opler, Pinkowitz, Stulz, and Williamson (1999). The results in Models 1 and 2 show that cash holdings significantly increase after the passage of the good faith exception. In terms of economic significance, the coefficient estimates in Model 1 (2) show that firms increase cash holdings (net cash holdings) by 12.9% (13.8%) following the passage of the good faith exception.<sup>22</sup>

In addition, if firms rely on cash holdings to cover cash flow shortfalls when labor adjustment costs increase, then these firms should save more cash out of cash flows following the passage of wrongful discharge laws. To test this prediction, I follow the methodology in Almeida, Campello, and Weisbach (2004) and examine changes in a firm's cash flow sensitivity of cash following the passage of these laws. Table XIII presents the results of this analysis. The dependent variable in Models 1 and 2 is the change in a firm's book value of cash and short-term investments over the previous year divided by the beginning of year book value of assets. I define *Cash Flow* as operating income before depreciation less the value of common and preferred dividends all divided by book value of assets. To investigate whether there are changes in a firm's cash flow sensitivity of cash following the passage of the good faith exception, I interact *Cash Flow* with the indicator variable *Good Faith*. A positive coefficient on the interaction term would suggest that firms save more cash out cash flows following the adoption of the good faith exception. I include the set of control variables used in Almeida, Campello, and Weisbach (2004). Model 2 also includes a control variable for acquisition related

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<sup>22</sup> I compute the economic significance as follows. The increase in *Log Cash Holdings* of 0.121 log points corresponds to an increase in cash holdings of  $e^{(0.121)}-1 = 12.9$  percentage points. Similarly, the increase in *Log Net Cash Holdings* of 0.129 log points corresponds to an increase in net cash holdings of  $e^{(0.129)}-1 = 13.8$  percentage points.

expenses. However, the variable AQC in Compustat is only available after 1971. Thus, Model 2 restricts the sample period to 1971-1995. The results in Models 1 and 2 show that firms save more cash out cash flows following the passage of the good faith exception. The estimated coefficients on the level and interaction term in Model 1 imply that before the passage of the good faith exception, firms save \$0.277 per dollar of cash flow. Following the passage of the good faith exception, however, this savings rate increases to \$0.338 ( $=0.277+0.061$ ).

Lastly, because the passage of state-level wrongful discharge laws makes it more costly to adjust labor expenses to cover cash flow shortfalls and firms use cash holdings to cover cash flow shortfalls, cash holdings should be more valuable for firms following the passage of these laws. To test this prediction, I follow the methodology in Faulkender and Wang (2006) and estimate changes in the marginal value of cash following the passage of these laws. Table XIV presents the results of this analysis. The dependent variable in Models 1 and 2 is excess stock returns, which is a firm's annual stock return less the annual return of an equally-weighted benchmark portfolio matched on firm size and the book-to-market ratio. I calculate the control variables exactly the same as those in Faulkender and Wang (2006). To examine whether the marginal value of cash is higher following the passage of the good faith exception, I interact the annual change in cash holdings with the indicator variable *Good Faith*. Model 2 allows the change in cash to vary with the level of cash and with leverage. The positive and statistically significant coefficients on the interaction terms in Models 1 and 2 suggest that the marginal value of cash is higher following the passage of the good faith exception. The coefficient estimates in Model 1 imply that following the passage of the good faith exception, the marginal value of cash increases from \$0.669 to \$0.834 ( $=0.669+0.165$ ). To estimate the marginal value of an additional dollar of cash in Model 2, I use mean values of lagged cash holdings (17.3%) and market leverage (28.9%). Using these values, the coefficient estimates in Model 2 imply that the marginal value of cash increases from \$0.825 ( $=1.063-0.329*0.173-0.628*0.289$ ) to \$0.917 ( $=1.063+0.092-0.329*0.173-0.628*0.289$ ) following the passage of the good faith exception.

## V. Conclusion

What factors impact corporate capital structure decisions? In addition to considering taxes, financial distress costs, agency conflicts, and other determinates of corporate financing, I

show that increases in labor adjustment costs arising from the passage of state-level labor protection laws also impact firms' financing decisions. Higher labor adjustment costs can lower a firm's debt capacity by reducing profitability, increasing the costs of financial distress, raising operating leverage, and increasing the likelihood of underinvestment, which results in lower financial leverage ratios. Consistent with this prediction, I find that firms respond to the passage of one particular wrongful discharge law—the good faith exception—by lowering financial leverage ratios.

In addition, this finding only holds for firms whose workers are more likely protected by these laws, in instances when employees are more likely to file wrongful termination claims against their employers, and for firms that have a greater tendency to dismiss workers. I also show that reverse causality and omitted variables related to local economic conditions, changes in the types of workers that a firm employs, or changes in a firm's operations unlikely drive these results. Lastly, an increase in the costs associated with dismissing employees affects not only debt financing decisions but also cash policies. Specifically, firms increase their cash holdings following the passage of wrongful discharge laws, and investors place a higher value on each additional dollar of cash holdings following the adoption of these laws. Overall, these findings suggest that labor market frictions in the form of labor adjustment costs have a significant impact on a firm's capital structure decisions. These results also provide insights into how labor regulations and litigation risk can impact a firm's financing choices.

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**Table I**  
**State-Level Wrongful Discharge Legislation**

This table reports the month and year when each state passed the good faith, implied contract, and public policy exceptions to the traditional employment at-will rule. The good faith exception protects employees from termination for bad cause and serves to prevent employers from denying employees their contract rights. The implied contract exception protects employees from termination when the employer has implicitly promised the employee not to discharge the worker without good cause. The public policy exception protects employees from termination for refusing to violate an established public policy or illegal act.

State	Month/Year Good Faith Exception Passed	Month/Year Implied Contract Exception Passed	Month/Year Public Policy Exception Passed
Alabama		7/1987	
Alaska	5/1983	5/1983	2/1986
Arizona	6/1985	6/1983 (Reversed 4/1984)	6/1985
Arkansas		6/1984	3/1980
California	10/1980	3/1972	9/1959
Colorado		10/1983	9/1985
Connecticut	6/1980	10/1985	1/1980
Delaware	4/1992		3/1992
Florida	2/1983		
Georgia			
Hawaii		8/1986	10/1982
Idaho	8/1989	4/1977	4/1977
Illinois		12/1974	12/1978
Indiana		8/1987	5/1973
Iowa		11/1987	7/1985
Kansas		8/1984	6/1981
Kentucky		8/1983	11/1983
Louisiana	1/1998		
Maine		11/1977	
Maryland		1/1985	7/1981
Massachusetts	7/1977	5/1988	5/1980
Michigan		6/1980	6/1976
Minnesota		4/1983	11/1986
Mississippi		6/1992	7/1987
Missouri		1/1983 (Reversed 2/1988)	11/1985
Montana	1/1982	6/1987	1/1980
Nebraska		11/1983	11/1987
Nevada	2/1987	8/1983	1/1984
New Hampshire	2/1974 (Reversed 5/1980)	8/1988	2/1974
New Jersey		5/1985	7/1980
New Mexico		2/1980	7/1983
New York		11/1982	
North Carolina			5/1985
North Dakota		2/1984	11/1987
Ohio		4/1982	3/1990
Oklahoma	5/1985 (Reversed 2/1989)	11/1976	2/1989
Oregon		3/1978	6/1975
Pennsylvania			3/1974
Rhode Island			
South Carolina		6/1987	11/1985
South Dakota		4/1983	12/1988
Tennessee		11/1981	8/1984
Texas		4/1984	6/1984
Utah	3/1989	5/1986	3/1989
Vermont		8/1985	9/1986
Virginia		9/1983	6/1985
Washington		8/1977	7/1984
West Virginia		4/1986	7/1978
Wisconsin		6/1985	1/1980
Wyoming	1/1994	8/1985	7/1989

**Table II**  
**Summary Statistics**

This table reports summary statistics for the main variables in the regression models. The sample consists of Compustat industrial firms (excluding financials and utilities) over the 1967 to 1995 period and includes 81,162 firm-year observations. All continuous variables are winsorized at their 1<sup>st</sup> and 99<sup>th</sup> percentiles, and dollar values are expressed in 2009 dollars. Variable definitions refer to Compustat designations where appropriate. *Book Leverage* is the book value of long-term debt plus (*dltt*) debt in current liabilities (*dlc*) divided by book value of assets (*at*). *Market Leverage* is the book value of long-term debt (*dltt*) plus debt in current liabilities (*dlc*) divided by market value of debt and equity (long-term debt (*dltt*) plus debt in current liabilities (*dlc*) plus market value of equity (*prcc\_f\*cscho*)). *Good Faith* is an indicator variable set to one if the state where a firm is headquartered has passed the good faith exception by year *t* and zero otherwise. *Implied Contract* is an indicator variable set to one if the state where a firm is headquartered has passed the implied contract exception by year *t* and zero otherwise. *Public Policy* is an indicator variable set to one if the state where a firm is headquartered has passed the public policy exception by year *t* and zero otherwise. *Assets* is the value of total book assets (*at*) in millions. *Market-to-Book* is the market value of assets (long-term debt (*dltt*) plus debt in current liabilities (*dlc*) plus market value of equity (*prcc\_f\*cscho*) plus value of preferred stock (*pstkrv*) minus deferred taxes and investment tax credits (*txdite*)) divided by book value of assets (*at*). *Return on Assets* is operating income before depreciation (*oibdp*) divided by book value of assets (*at*). *Fixed Assets* is the ratio of property, plant, and equipment (*ppent*) to book value of assets. *Cash Flow Volatility* is the standard deviation of operating income before depreciation (*oibdp*) divided by book value of assets (*at*) over the previous ten years for each firm (firms are required to have at least three years of data to enter the calculation). *Dividend Payer* is an indicator variable set to one if a firm pays a common dividend (*div*) during a fiscal year and zero otherwise. *Modified Z-Score* is the modified Altman's z-score ( $1.2*(wcap/at)+1.4*(re/at)+3.3*(ebit/at)+(sale/at)$ ). *State GDP Growth* is the state-level GDP growth rate over the fiscal year.

	Mean	Std. Dev.	P25	Median	P75
<i>Dependent Variables</i>					
Book Leverage	0.25	0.19	0.10	0.23	0.36
Market Leverage	0.29	0.24	0.07	0.24	0.45
<i>Main Explanatory Variables</i>					
Good Faith	0.17	0.37	0.00	0.00	0.00
Implied Contract	0.52	0.50	0.00	0.00	1.00
Public Policy	0.54	0.50	0.00	1.00	1.00
<i>Control Variables</i>					
Assets	1343	7040	41.92	151.6	581.1
Market-to-Book	1.35	1.28	0.66	0.94	1.49
Return on Assets	0.10	0.16	0.07	0.13	0.19
Fixed Assets	0.33	0.21	0.17	0.29	0.45
Cash Flow Volatility	0.08	0.10	0.03	0.05	0.10
Dividend Payer	0.48	0.50	0.00	0.00	1.00
Modified Z-Score	2.06	1.96	1.43	2.36	3.11
State GDP Growth	0.08	0.04	0.06	0.08	0.10

**Table III**  
**Wrongful Discharge Laws and Financial Leverage**

This table reports the results from OLS regressions relating financial leverage to the enactment of wrongful discharge laws for Compustat industrial firms from 1967 to 1995. The dependent variable in Panel A is *Book Leverage*, which is the book value of long-term debt plus debt in current liabilities divided by book value of assets. The dependent variable in Panel B is *Market Leverage*, which is the book value of long-term debt plus debt in current liabilities divided by market value of assets. *Good Faith*, *Implied Contract*, and *Public Policy* are indicator variables set to one if the state where a firm is headquartered has passed the good faith exception, the implied contract exception, and the public policy exception by year  $t$  and zero otherwise, respectively. Table II provides definitions of control variables. All continuous variables are winsorized at their 1<sup>st</sup> and 99<sup>th</sup> percentiles, and dollar values are expressed in 2009 dollars. Standard errors are corrected for heteroskedasticity and clustering at the state level (t-statistics are in parentheses). \*, \*\*, and \*\*\* denote significance at the 10%, 5%, and 1% level, respectively. The critical t value (two-tailed with 49 degrees of freedom) for significance at the 10%, 5%, and 1% level is 1.68, 2.01, and 2.68, respectively.

<i>Panel A: Dependent Variable is Book Leverage</i>				
	(1)	(2)	(3)	(4)
Good Faith	-0.015** (-2.62)			-0.016** (-2.66)
Implied Contract		-0.001 (-0.38)		-0.003 (-1.00)
Public Policy			0.002 (0.52)	0.002 (0.74)
Log Assets	0.046*** (14.32)	0.046*** (14.37)	0.046*** (14.42)	0.046*** (14.35)
Market-to-Book	-0.006*** (-4.11)	-0.006*** (-4.06)	-0.006*** (-4.05)	-0.006*** (-4.11)
Return on Assets	0.102*** (5.72)	0.102*** (5.71)	0.102*** (5.71)	0.102*** (5.74)
Fixed Assets	0.189*** (11.53)	0.188*** (11.53)	0.188*** (11.53)	0.189*** (11.54)
Cash Flow Volatility	0.001 (0.02)	0.002 (0.06)	0.002 (0.05)	0.001 (0.03)
Dividend Payer	-0.052*** (-13.81)	-0.052*** (-13.71)	-0.052*** (-13.76)	-0.052*** (-13.83)
Modified Z-Score	-0.057*** (-21.61)	-0.057*** (-21.51)	-0.057*** (-21.59)	-0.057*** (-21.61)
State GDP Growth	0.021 (0.80)	0.016 (0.61)	0.016 (0.65)	0.020 (0.81)
Year Fixed Effects	Yes	Yes	Yes	Yes
Firm Fixed Effects	Yes	Yes	Yes	Yes
Observations	81,162	81,162	81,162	81,162
Adjusted R <sup>2</sup>	0.698	0.698	0.698	0.698

**Table III - (Continued)**

<i>Panel B: Dependent Variable is Market Leverage</i>				
	(1)	(2)	(3)	(4)
Good Faith	-0.013** (-2.48)			-0.014** (-2.68)
Implied Contract		-0.001 (-0.15)		-0.002 (-0.53)
Public Policy			0.002 (0.65)	0.003 (0.80)
Log Assets	0.055*** (13.57)	0.055*** (13.61)	0.055*** (13.62)	0.055*** (13.60)
Market-to-Book	-0.042*** (-15.51)	-0.042*** (-15.51)	-0.042*** (-15.53)	-0.042*** (-15.49)
Return on Assets	-0.053* (-1.97)	-0.054* (-1.99)	-0.054* (-1.99)	-0.053* (-1.98)
Fixed Assets	0.187*** (11.97)	0.187*** (11.97)	0.187*** (11.96)	0.187*** (11.97)
Cash Flow Volatility	-0.079** (-2.06)	-0.078** (-2.02)	-0.078** (-2.02)	-0.079** (-2.06)
Dividend Payer	-0.081*** (-19.31)	-0.081*** (-19.10)	-0.081*** (-19.08)	-0.081*** (-19.32)
Modified Z-Score	-0.049*** (-27.30)	-0.049*** (-27.23)	-0.049*** (-27.26)	-0.049*** (-27.31)
State GDP Growth	-0.230*** (-4.38)	-0.234*** (-4.46)	-0.234*** (-4.59)	-0.230*** (-4.53)
Year Fixed Effects	Yes	Yes	Yes	Yes
Firm Fixed Effects	Yes	Yes	Yes	Yes
Observations	81,162	81,162	81,162	81,162
Adjusted R <sup>2</sup>	0.727	0.727	0.727	0.727

**Table IV**  
**Wrongful Discharge Laws and the Timing of Capital Structure Changes**

This table reports the results from OLS regressions relating financial leverage to the enactment of wrongful discharge laws for Compustat industrial firms from 1967 to 1995. The dependent variable in Model 1 is *Book Leverage*, which is the book value of long-term debt plus debt in current liabilities divided by book value of assets. The dependent variable in Model 2 is *Market Leverage*, which is the book value of long-term debt plus debt in current liabilities divided by market value of assets. *Good Faith<sup>1</sup>* is an indicator variable set to one if a firm is headquartered in a state that will pass the good faith exception in one year and zero otherwise. *Good Faith<sup>0</sup>* is an indicator variable set to one if a firm is headquartered in a state that passes the good faith exception this year and zero otherwise. *Good Faith<sup>1</sup>* is an indicator variable set to one if a firm is headquartered in a state that passed the good faith exception one year ago and zero otherwise. *Good Faith<sup>2+</sup>* is an indicator variable set to one if a firm is headquartered in a state that passed the good faith exception two or more years ago and zero otherwise. Table II provides definitions of control variables. All continuous variables are winsorized at their 1<sup>st</sup> and 99<sup>th</sup> percentiles, and dollar values are expressed in 2009 dollars. Standard errors are corrected for heteroskedasticity and clustering at the state level (t-statistics are in parentheses). \*, \*\*, and \*\*\* denote significance at the 10%, 5%, and 1% level, respectively.

	Book Leverage (1)	Market Leverage (2)
Good Faith <sup>1</sup>	0.005 (0.89)	0.008 (1.05)
Good Faith <sup>0</sup>	-0.006 (-1.48)	-0.010 (-1.18)
Good Faith <sup>1</sup>	-0.016** (-2.05)	-0.010 (-1.46)
Good Faith <sup>2+</sup>	-0.018** (-2.59)	-0.013** (-2.09)
Implied Contract	-0.004 (-1.35)	-0.002 (-0.60)
Public Policy	0.002 (0.79)	0.003 (0.86)
Log Assets	0.046*** (14.23)	0.055*** (13.53)
Market-to-Book	-0.006*** (-4.09)	-0.042*** (-15.35)
Return on Assets	0.103*** (5.70)	-0.054* (-1.96)
Fixed Assets	0.188*** (11.31)	0.186*** (11.79)
Cash Flow Volatility	-0.002 (-0.05)	-0.079** (-2.02)
Dividend Payer	-0.052*** (-13.71)	-0.080*** (-19.22)
Modified Z-Score	-0.057*** (-21.29)	-0.049*** (-26.97)
State GDP Growth	0.021 (0.87)	-0.233*** (-4.60)
Year Fixed Effects	Yes	Yes
Firm Fixed Effects	Yes	Yes
Observations	80,636	80,636
Adjusted R <sup>2</sup>	0.699	0.727

**Table V**

**Wrongful Discharge Laws, Financial Leverage, and Additional Control Variables**

This table reports the results from OLS regressions relating financial leverage to the enactment of wrongful discharge laws for Compustat industrial firms from 1967 to 1995. Variable definitions refer to Compustat designations where appropriate. The dependent variable in Panel A is *Book Leverage*, which is the book value of long-term debt plus debt in current liabilities divided by book value of assets. The dependent variable in Panel B is *Market Leverage*, which is the book value of long-term debt plus debt in current liabilities divided by market value of assets. *Good Faith*, *Implied Contract*, and *Public Policy* are indicator variables set to one if the state where a firm is headquartered has passed the good faith exception, the implied contract exception, and the public policy exception by year  $t$  and zero otherwise, respectively. *State Unemployment Rate* is the fraction of workers within a state that are in the labor force but unemployed. *State Union Membership* is the fraction of each state's nonagricultural wage and salary employees who are covered by a collective bargaining agreement. *Right-to-Work Law* is an indicator variable set one if a firm is headquartered in a state that has passed right-to-work laws by year  $t$  and zero otherwise. *Bordering States' Good Faith*, *Bordering States' Implied Contract*, and *Bordering States' Public Policy* are the fraction of states that border the state where a firm is headquartered that have passed the good faith, implied contract, and public policy exceptions by year  $t$ , respectively. *Full-Time Workers* is the fraction of employees that work at least 40 hours per week grouped by 3-digit NAICS industries and state. *Labor-to-Assets* is the number of employees ( $emp$ ) to the real book value of assets ( $at$ ), where book values of assets are converted into 2009 dollars. Control variables include *Log Assets*, *Market-to-Book*, *Return on Assets*, *Fixed Assets*, *Cash Flow Volatility*, *Dividend Payer*, *Modified Z-Score*, and *State GDP Growth*. Table II provides definitions of control variables. All continuous variables are winsorized at their 1<sup>st</sup> and 99<sup>th</sup> percentiles, and dollar values are expressed in 2009 dollars. Standard errors are corrected for heteroskedasticity and clustering at the state level (t-statistics are in parentheses). \*, \*\*, and \*\*\* denote significance at the 10%, 5%, and 1% level, respectively.

<i>Panel A: Dependent Variable is Book Leverage</i>				
	(1)	(2)	(3)	(4)
Good Faith	-0.018*** (-2.92)	-0.017*** (-2.85)	-0.014** (-2.43)	-0.012** (-2.15)
Implied Contract	-0.002 (-0.71)	-0.002 (-0.69)	-0.003 (-0.92)	-0.002 (-0.71)
Public Policy	0.003 (0.97)	0.003 (0.91)	0.002 (0.54)	0.003 (0.87)
State Unemployment Rate	-0.145*** (-2.77)	-0.145*** (-2.75)	-0.134** (-2.61)	-0.138*** (-2.74)
State Union Membership		-0.076 (-1.48)	-0.093* (-1.74)	-0.076 (-1.47)
Right-to-Work Law		-0.004 (-0.44)	-0.005 (-0.61)	-0.005 (-0.56)
Bordering States' Good Faith			-0.011 (-1.29)	-0.009 (-1.00)
Bordering States' Implied Contract			-0.014* (-1.75)	-0.010 (-1.40)
Bordering States' Public Policy			-0.008 (-1.08)	-0.007 (-1.00)
Full Time Workers				0.023 (0.84)
Labor-to-Assets				0.650** (2.42)
Control Variables	Yes	Yes	Yes	Yes
Year Fixed Effects	Yes	Yes	Yes	Yes
Firm Fixed Effects	Yes	Yes	Yes	Yes
Observations	81,162	81,162	81,007	74,031
Adjusted R <sup>2</sup>	0.699	0.699	0.699	0.701

**Table V - (Continued)**

<i>Panel B: Dependent Variable is Market Leverage</i>				
	(1)	(2)	(3)	(4)
Good Faith	-0.014*** (-2.79)	-0.014*** (-2.71)	-0.014*** (-3.01)	-0.012** (-2.46)
Implied Contract	-0.002 (-0.49)	-0.002 (-0.43)	-0.001 (-0.38)	-0.002 (-0.43)
Public Policy	0.003 (0.82)	0.003 (0.81)	0.003 (0.76)	0.003 (0.96)
State Unemployment Rate	-0.032 (-0.51)	-0.033 (-0.52)	-0.029 (-0.43)	-0.020 (-0.35)
State Union Membership		-0.057 (-0.75)	-0.072 (-0.95)	-0.100 (-1.39)
Right-to-Work Laws		-0.016** (-2.15)	-0.015* (-1.87)	-0.013* (-1.79)
Bordering States' Good Faith			0.006 (0.48)	0.006 (0.48)
Bordering States' Implied Contract			-0.009 (-0.86)	-0.005 (-0.55)
Bordering States' Public Policy			-0.013 (-1.20)	-0.011 (-1.03)
Full Time Workers				-0.017 (-0.58)
Labor-to-Assets				0.708** (2.44)
Control Variables	Yes	Yes	Yes	Yes
Year Fixed Effects	Yes	Yes	Yes	Yes
Firm Fixed Effects	Yes	Yes	Yes	Yes
Observations	81,162	81,162	81,007	74,031
Adjusted R <sup>2</sup>	0.727	0.727	0.727	0.731

**Table VI**  
**Effect of Labor Market Characteristics**

This table reports the results from OLS regressions relating financial leverage to the enactment of wrongful discharge laws for Compustat industrial firms from 1967 to 1995. The dependent variable in Panel A is *Book Leverage*, which is the book value of long-term debt plus debt in current liabilities divided by book value of assets. The dependent variable in Panel B is *Market Leverage*, which is the book value of long-term debt plus debt in current liabilities divided by market value of assets. *Good Faith*, *Implied Contract*, and *Public Policy* are indicator variables set to one if the state where a firm is headquartered has passed the good faith exception, the implied contract exception, and the public policy exception by year  $t$  and zero otherwise, respectively. *Full-Time Workers* is the fraction of employees that work at least 40 hours per week grouped by 3-digit NAICS industries and state. *Mean Worker Income* is the mean annual wage of all employees grouped by 3-digit NAICS industries and state. *State Unemployment Rate* is the fraction of workers within a state that are in the labor force but unemployed. *State Union Membership* is the fraction of each state's nonagricultural wage and salary employees who are covered by a collective bargaining agreement. *Blue Collar Industries* are industries with above sample median fraction of workers that are employed in blue collar occupations grouped by 3-digit NAICS industries and state. Samples are divided into those with above and below sample median values for each particular measure. Table II provides definitions of control variables. All continuous variables are winsorized at their 1<sup>st</sup> and 99<sup>th</sup> percentiles, and dollar values are expressed in 2009 dollars. Standard errors are corrected for heteroskedasticity and clustering at the state level (t-statistics are in parentheses). \*, \*\*, and \*\*\* denote significance at the 10%, 5%, and 1% level, respectively.

	Full Time Workers		Mean Worker Income		State Unemployment Rate		State Union Membership for Blue Collar Industries	
	Above Median	Below Median	Above Median	Below Median	Above Median	Below Median	Below Median	Above Median
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Good Faith	-0.024*** (-3.02)	-0.010 (-0.86)	-0.026*** (-3.38)	-0.012 (-1.55)	-0.020*** (-3.68)	-0.011 (-1.22)	-0.046*** (-2.90)	-0.005 (-0.76)
Implied Contract	-0.001 (-0.13)	-0.003 (-0.66)	-0.001 (-0.30)	-0.003 (-0.65)	0.000 (0.07)	-0.005 (-0.87)	-0.003 (-0.53)	0.002 (0.45)
Public Policy	0.003 (0.60)	-0.002 (-0.44)	0.008* (1.71)	-0.001 (-0.17)	0.004 (1.05)	0.002 (0.30)	0.004 (0.57)	0.007 (1.24)
Log Assets	0.052*** (16.32)	0.047*** (7.99)	0.045*** (13.34)	0.048*** (10.34)	0.049*** (12.40)	0.042*** (9.81)	0.057*** (12.33)	0.058*** (6.94)
Market-to-Book	-0.006*** (-2.80)	-0.005** (-2.46)	-0.005*** (-3.23)	-0.006** (-2.53)	-0.004* (-1.90)	-0.006*** (-3.20)	-0.004*** (-2.74)	-0.007 (-1.66)
Return on Assets	0.114*** (5.23)	0.091*** (4.07)	0.099*** (5.66)	0.100*** (3.81)	0.111*** (4.91)	0.101*** (4.92)	0.089*** (3.18)	0.084* (1.75)
Fixed Assets	0.182*** (8.97)	0.204*** (9.73)	0.202*** (10.33)	0.191*** (9.69)	0.209*** (9.13)	0.163*** (7.97)	0.161*** (6.04)	0.184*** (5.71)
Cash Flow Volatility	0.080* (1.82)	-0.069** (-2.05)	0.003 (0.07)	0.018 (0.47)	0.030 (0.53)	-0.044 (-0.95)	0.061* (1.87)	-0.044 (-0.63)
Dividend Payer	-0.053*** (-12.57)	-0.049*** (-9.73)	-0.052*** (-11.00)	-0.053*** (-9.70)	-0.052*** (-13.34)	-0.047*** (-8.51)	-0.042*** (-7.72)	-0.050*** (-8.13)
Modified Z-Score	-0.055*** (-16.99)	-0.060*** (-16.89)	-0.052*** (-17.12)	-0.062*** (-13.74)	-0.057*** (-19.73)	-0.060*** (-15.46)	-0.050*** (-9.75)	-0.061*** (-9.33)
State GDP Growth	-0.038 (-1.03)	0.023 (0.63)	-0.030 (-0.73)	0.032 (1.15)	0.007 (0.15)	-0.001 (-0.02)	-0.062 (-1.31)	0.036 (0.86)
Year Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Firm Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	38,293	38,304	38,236	38,361	40,624	40,538	19,135	19,295
Adjusted R <sup>2</sup>	0.682	0.743	0.690	0.735	0.720	0.723	0.699	0.715

**Table VI - (Continued)***Panel B: Dependent Variable is Market Leverage*

	Full Time Workers		Mean Worker Income		State Unemployment Rate		State Union Membership for Blue Collar Industries	
	Above Median	Below Median	Above Median	Below Median	Above Median	Below Median	Below Median	Above Median
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Good Faith	-0.023** (-2.25)	-0.005 (-0.44)	-0.025*** (-3.50)	-0.008 (-1.12)	-0.025*** (-4.84)	-0.001 (-0.10)	-0.024* (-1.85)	-0.001 (-0.19)
Implied Contract	0.001 (0.18)	-0.004 (-0.80)	0.000 (0.02)	-0.003 (-0.67)	-0.002 (-0.54)	-0.005 (-0.87)	0.006 (0.91)	0.002 (0.29)
Public Policy	0.002 (0.31)	-0.001 (-0.11)	0.012** (2.66)	-0.000 (-0.04)	0.008 (1.45)	-0.004 (-0.73)	0.000 (0.03)	0.006 (0.97)
Log Assets	0.063*** (14.48)	0.058*** (6.95)	0.055*** (13.70)	0.059*** (9.06)	0.062*** (12.63)	0.050*** (11.97)	0.069*** (12.31)	0.066*** (7.65)
Market-to-Book	-0.040*** (-11.87)	-0.039*** (-13.58)	-0.034*** (-14.38)	-0.048*** (-15.94)	-0.044*** (-8.87)	-0.040*** (-15.50)	-0.038*** (-9.36)	-0.050*** (-8.84)
Return on Assets	-0.023 (-0.82)	-0.077*** (-2.71)	-0.007 (-0.26)	-0.137*** (-4.73)	-0.033 (-0.95)	-0.076*** (-3.65)	-0.075** (-2.25)	-0.180*** (-4.63)
Fixed Assets	0.195*** (10.08)	0.194*** (9.25)	0.205*** (10.50)	0.190*** (9.05)	0.212*** (9.82)	0.154*** (7.12)	0.159*** (7.20)	0.201*** (5.01)
Cash Flow Volatility	0.052 (1.00)	-0.244*** (-7.92)	-0.010 (-0.19)	-0.174*** (-4.86)	-0.050 (-1.05)	-0.133*** (-3.01)	0.002 (0.05)	-0.217** (-2.18)
Dividend Payer	-0.081*** (-16.04)	-0.078*** (-14.25)	-0.082*** (-12.84)	-0.081*** (-13.44)	-0.078*** (-17.57)	-0.075*** (-12.41)	-0.070*** (-10.36)	-0.086*** (-14.20)
Modified Z-Score	-0.048*** (-24.36)	-0.051*** (-17.32)	-0.045*** (-22.28)	-0.051*** (-12.55)	-0.050*** (-20.95)	-0.049*** (-15.82)	-0.040*** (-10.24)	-0.050*** (-7.46)
State GDP Growth	-0.305*** (-5.70)	-0.141** (-2.46)	-0.299*** (-3.80)	-0.156*** (-3.97)	-0.196*** (-3.54)	-0.194*** (-2.87)	-0.259*** (-5.79)	-0.090 (-1.29)
Year Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Firm Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	38,293	38,304	38,236	38,361	40,624	40,538	19,135	19,295
Adjusted R <sup>2</sup>	0.723	0.761	0.727	0.751	0.753	0.741	0.739	0.755

**Table VII**  
**Effect of Layoff Propensity Rates**

This table reports the results from OLS regressions relating financial leverage to the enactment of wrongful discharge laws for Compustat industrial firms from 1967 to 1995. The dependent variable in Panel A is *Book Leverage*, which is the book value of long-term debt plus debt in current liabilities divided by book value of assets. The dependent variable in Panel B is *Market Leverage*, which is the book value of long-term debt plus debt in current liabilities divided by market value of assets. *Good Faith*, *Implied Contract*, and *Public Policy* are indicator variables set to one if the state where a firm is headquartered has passed the good faith exception, the implied contract exception, and the public policy exception by year  $t$  and zero otherwise, respectively. *Industry Layoff Propensity* the fraction of a firm's 3-digit NAICS industry that reduces its number of employees during a year by at least 5%. This measure is averaged over the previous ten years to determine the industry's layoff propensity rate. *BLS Layoff Propensity* is based on the average annual fraction of workers separated from work as part of a mass layoff. The measure uses data from the U.S. Bureau of Labor Statistics' (BLS) "Mass Layoff Statistics" and the U.S. Bureau of Economic Analysis (BEA) and is based on 3-digit NAICS industries over all of the years when the data are available (1996–2008). This measure is then used as a single industry measure for the entire sample period from 1967 to 1995. Samples are divided into those with above and below sample median values for each particular measure. Table II provides definitions of control variables. All continuous variables are winsorized at their 1<sup>st</sup> and 99<sup>th</sup> percentiles, and dollar values are expressed in 2009 dollars. Standard errors are corrected for heteroskedasticity and clustering at the state level (t-statistics are in parentheses). \*, \*\*, and \*\*\* denote significance at the 10%, 5%, and 1% level, respectively.

<i>Panel A: Dependent Variable is Book Leverage</i>				
	Industry Layoff Propensity		BLS Industry Layoff Propensity	
	Above Median	Below Median	Above Median	Below Median
	(1)	(2)	(3)	(4)
Good Faith	-0.036*** (-3.99)	-0.001 (-0.12)	-0.026*** (-2.90)	-0.006 (-0.68)
Implied Contract	-0.005 (-1.20)	0.001 (0.34)	-0.002 (-0.50)	-0.002 (-0.60)
Public Policy	-0.000 (-0.00)	0.002 (0.52)	0.004 (1.06)	-0.002 (-0.30)
Log Assets	0.056*** (13.90)	0.046*** (9.83)	0.039*** (8.03)	0.052*** (12.97)
Market-to-Book	-0.005*** (-3.19)	-0.005** (-2.28)	-0.003 (-1.28)	-0.006*** (-3.89)
Return on Assets	0.112*** (5.18)	0.086*** (4.12)	0.105*** (3.63)	0.103*** (5.07)
Fixed Assets	0.208*** (9.62)	0.183*** (9.35)	0.159*** (6.47)	0.214*** (11.76)
Cash Flow Volatility	0.062* (1.74)	-0.019 (-0.37)	0.032 (0.66)	0.005 (0.13)
Dividend Payer	-0.052*** (-12.31)	-0.043*** (-9.98)	-0.053*** (-10.78)	-0.050*** (-9.58)
Modified Z-Score	-0.054*** (-18.37)	-0.064*** (-15.67)	-0.060*** (-13.60)	-0.055*** (-15.91)
State GDP Growth	-0.022 (-0.67)	0.004 (0.10)	0.022 (0.76)	-0.000 (-0.00)
Year Fixed Effects	Yes	Yes	Yes	Yes
Firm Fixed Effects	Yes	Yes	Yes	Yes
Observations	39,574	39,610	35,110	37,494
Adjusted R <sup>2</sup>	0.710	0.758	0.681	0.712

**Table VII - (Continued)**

	Industry Layoff Propensity		BLS Industry Layoff Propensity	
	Above Median	Below Median	Below Median	Above Median
	(1)	(2)	(3)	(4)
Good Faith	-0.033*** (-2.82)	-0.003 (-0.47)	-0.022** (-2.60)	-0.009 (-1.15)
Implied Contract	-0.005 (-0.95)	0.001 (0.15)	0.001 (0.23)	-0.004 (-0.94)
Public Policy	-0.005 (-0.97)	-0.001 (-0.21)	0.002 (0.42)	0.002 (0.38)
Log Assets	0.068*** (15.38)	0.060*** (12.35)	0.049*** (10.57)	0.059*** (11.45)
Market-to-Book	-0.043*** (-12.89)	-0.034*** (-12.97)	-0.043*** (-10.62)	-0.038*** (-12.25)
Return on Assets	-0.004 (-0.14)	-0.130*** (-4.42)	-0.085* (-1.94)	-0.031 (-1.12)
Fixed Assets	0.202*** (10.99)	0.187*** (9.41)	0.147*** (6.40)	0.218*** (11.03)
Cash Flow Volatility	0.030 (0.83)	-0.172*** (-2.96)	-0.051 (-0.91)	-0.085* (-1.88)
Dividend Payer	-0.074*** (-15.35)	-0.071*** (-13.15)	-0.083*** (-15.55)	-0.076*** (-11.91)
Modified Z-Score	-0.049*** (-20.91)	-0.052*** (-15.89)	-0.051*** (-11.02)	-0.047*** (-15.76)
State GDP Growth	-0.238*** (-4.81)	-0.248*** (-3.91)	-0.178*** (-3.25)	-0.320*** (-4.57)
Year Fixed Effects	Yes	Yes	Yes	Yes
Firm Fixed Effects	Yes	Yes	Yes	Yes
Observations	39,574	39,610	35,110	37,494
Adjusted R <sup>2</sup>	0.733	0.778	0.722	0.735

**Table VIII**  
**Effect of Asset Liquidity**

This table reports the results from OLS regressions relating financial leverage to the enactment of wrongful discharge laws for Compustat industrial firms from 1967 to 1995. Variable definitions refer to Compustat designations where appropriate. The dependent variable in Panel A is *Book Leverage*, which is the book value of long-term debt plus debt in current liabilities divided by book value of assets. The dependent variable in Panel B is *Market Leverage*, which is the book value of long-term debt plus debt in current liabilities divided by market value of assets. *Good Faith*, *Implied Contract*, and *Public Policy* are indicator variables set to one if the state where a firm is headquartered has passed the good faith exception, the implied contract exception, and the public policy exception by year  $t$  and zero otherwise, respectively. *Current Assets* is book value of current assets (*act*) divided by book value of assets (*at*). *Working Capital* is working capital (*wcap*) divided by book value of assets (*at*). *Modified Z-Score* is the modified Altman's z-score (leverage excluded from calculation). Samples are divided into those with above and below sample median values for each particular measure. Table II provides definitions of control variables. All continuous variables are winsorized at their 1<sup>st</sup> and 99<sup>th</sup> percentiles, and dollar values are expressed in 2009 dollars. Standard errors are corrected for heteroskedasticity and clustering at the state level (t-statistics are in parentheses). \*, \*\*, and \*\*\* denote significance at the 10%, 5%, and 1% level, respectively.

	Current Assets		Working Capital		Modified Z-Score	
	Below Median	Above Median	Below Median	Above Median	Below Median	Above Median
	(1)	(2)	(3)	(4)	(5)	(6)
Good Faith	-0.023** (-2.16)	-0.007 (-1.06)	-0.023** (-2.50)	-0.008 (-1.08)	-0.024*** (-2.71)	-0.006 (-0.85)
Implied Contract	-0.006* (-1.80)	0.003 (0.67)	-0.008* (-1.81)	0.005 (1.53)	-0.010** (-2.18)	0.003 (0.92)
Public Policy	-0.002 (-0.47)	0.004 (1.14)	-0.001 (-0.32)	0.002 (0.61)	0.001 (0.21)	0.001 (0.20)
Log Assets	0.051*** (11.81)	0.039*** (8.83)	0.048*** (11.91)	0.041*** (11.20)	0.050*** (12.63)	0.016*** (5.32)
Market-to-Book	-0.005*** (-2.88)	-0.005*** (-2.94)	-0.002 (-1.20)	-0.006*** (-3.77)	-0.004* (-1.98)	-0.000 (-0.21)
Return on Assets	0.121*** (4.36)	0.074*** (4.07)	0.074*** (3.77)	0.086*** (6.01)	0.128*** (6.77)	0.098*** (3.88)
Fixed Assets	0.155*** (9.15)	0.195*** (8.19)	0.140*** (9.44)	0.148*** (8.15)	0.200*** (13.24)	0.136*** (5.87)
Cash Flow Volatility	-0.044 (-0.72)	0.025 (0.81)	-0.027 (-0.45)	-0.009 (-0.23)	0.023 (0.59)	-0.025 (-0.65)
Dividend Payer	-0.058*** (-8.61)	-0.041*** (-12.00)	-0.059*** (-9.74)	-0.035*** (-9.87)	-0.050*** (-10.49)	-0.028*** (-9.07)
Modified Z-Score	-0.065*** (-15.31)	-0.052*** (-20.72)	-0.057*** (-17.96)	-0.044*** (-15.67)	-0.049*** (-17.94)	-0.081*** (-22.32)
State GDP Growth	0.006 (0.16)	0.029 (1.17)	-0.020 (-0.61)	0.035 (1.35)	-0.015 (-0.46)	0.038 (1.40)
Year Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes
Firm Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes
Observations	40,581	40,581	40,566	40,566	40,581	40,581
Adjusted R <sup>2</sup>	0.713	0.699	0.697	0.699	0.672	0.726

**Table VIII - (Continued)***Panel B: Dependent Variable is Market Leverage*

	Current Assets		Working Capital		Modified Z-Score	
	Below Median	Above Median	Below Median	Above Median	Below Median	Above Median
	(1)	(2)	(3)	(4)	(5)	(6)
Good Faith	-0.021** (-2.45)	-0.004 (-0.62)	-0.025*** (-3.09)	-0.009 (-1.34)	-0.024*** (-3.11)	-0.006 (-1.00)
Implied Contract	-0.005 (-1.00)	0.003 (0.50)	-0.008 (-1.49)	0.004 (0.72)	-0.006 (-0.93)	0.001 (0.33)
Public Policy	-0.000 (-0.09)	0.002 (0.50)	0.002 (0.42)	0.002 (0.68)	0.003 (0.37)	0.000 (0.08)
Log Assets	0.056*** (14.21)	0.048*** (8.58)	0.054*** (11.41)	0.047*** (9.93)	0.059*** (15.50)	0.020*** (4.90)
Market-to-Book	-0.055*** (-23.10)	-0.032*** (-11.57)	-0.062*** (-22.61)	-0.026*** (-11.24)	-0.045*** (-12.53)	-0.018*** (-7.46)
Return on Assets	-0.052* (-1.91)	-0.071** (-2.57)	-0.068*** (-2.80)	-0.080** (-2.19)	0.026 (1.49)	-0.290*** (-6.11)
Fixed Assets	0.148*** (8.48)	0.191*** (7.13)	0.133*** (9.19)	0.163*** (7.57)	0.181*** (12.02)	0.178*** (6.56)
Cash Flow Volatility	-0.097 (-1.60)	-0.065* (-1.69)	-0.129** (-2.21)	-0.073 (-1.37)	-0.037 (-0.90)	-0.166*** (-3.15)
Dividend Payer	-0.085*** (-11.58)	-0.071*** (-14.17)	-0.085*** (-13.34)	-0.061*** (-12.27)	-0.073*** (-13.19)	-0.054*** (-13.35)
Modified Z-Score	-0.056*** (-19.08)	-0.046*** (-21.62)	-0.051*** (-18.87)	-0.039*** (-15.53)	-0.042*** (-16.45)	-0.072*** (-15.75)
State GDP Growth	-0.280*** (-4.65)	-0.098** (-2.36)	-0.301*** (-4.85)	-0.119** (-2.66)	-0.357*** (-6.33)	-0.074* (-1.69)
Year Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes
Firm Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes
Observations	40,581	40,581	40,566	40,566	40,581	40,581
Adjusted R <sup>2</sup>	0.741	0.739	0.729	0.745	0.730	0.767

**Table IX**

**Alternative Dating Schemes for the Enactment of Wrongful Discharge Laws**

This table reports the results from OLS regressions relating financial leverage to the enactment of wrongful discharge laws for Compustat industrial firms. The dependent variable in Panel A is *Book Leverage*, which is the book value of long-term debt plus debt in current liabilities divided by book value of assets. The dependent variable in Panel B is *Market Leverage*, which is the book value of long-term debt plus debt in current liabilities divided by market value of assets. *Good Faith*, *Implied Contract*, and *Public Policy* are indicator variables set to one if the state where a firm is headquartered has passed the good faith exception, the implied contract exception, and the public policy exception by year  $t$  and zero otherwise, respectively. Models 1-3 use the full sample from 1967 to 1995. Models 4-6 restrict the sample to the 1967 to 1991 period. Models 1 and 4 define *Good Faith*, *Implied Contract*, and *Public Policy* using the precedent setting cases identified in Autor, Donohue, and Schwab (2006). Models 2 and 5 define *Good Faith*, *Implied Contract*, and *Public Policy* using the precedent setting cases identified in Dertouzos and Karoly (1992). Models 3 and 6 define *Good Faith*, *Implied Contract*, and *Public Policy* using the precedent setting cases identified in Morriss (1995). Table II provides definitions of control variables. All continuous variables are winsorized at their 1<sup>st</sup> and 99<sup>th</sup> percentiles, and dollar values are expressed in 2009 dollars. Standard errors are corrected for heteroskedasticity and clustering at the state level (t-statistics are in parentheses). \*, \*\*, and \*\*\* denote significance at the 10%, 5%, and 1% level, respectively.

	Full Sample Period: 1967-1995			Sample Period: 1967-1991		
	Autor, Donohue, and Schwab (2006)	Dertouzos and Karoly (1992)	Morriss (1995)	Autor, Donohue, and Schwab (2006)	Dertouzos and Karoly (1992)	Morriss (1995)
	(1)	(2)	(3)	(4)	(5)	(6)
Good Faith	-0.015** (-2.53)	-0.014** (-2.32)	-0.016** (-2.64)	-0.011** (-2.11)	-0.010* (-1.90)	-0.012** (-2.23)
Implied Contract	-0.003 (-1.00)	0.001 (0.25)	-0.000 (-0.04)	-0.002 (-0.84)	-0.000 (-0.09)	0.000 (0.01)
Public Policy	0.002 (0.67)	-0.001 (-0.41)	0.001 (0.24)	0.003 (0.94)	-0.000 (-0.00)	0.002 (0.70)
Log Assets	0.046*** (14.35)	0.046*** (14.50)	0.046*** (14.39)	0.051*** (16.63)	0.051*** (16.81)	0.051*** (16.67)
Market-to-Book	-0.006*** (-4.10)	-0.006*** (-4.07)	-0.006*** (-4.09)	-0.004*** (-2.71)	-0.004*** (-2.69)	-0.004*** (-2.71)
Return on Assets	0.102*** (5.74)	0.102*** (5.74)	0.102*** (5.72)	0.111*** (5.59)	0.111*** (5.59)	0.111*** (5.58)
Fixed Assets	0.189*** (11.54)	0.188*** (11.55)	0.189*** (11.54)	0.180*** (10.54)	0.180*** (10.54)	0.180*** (10.52)
Cash Flow Volatility	0.001 (0.03)	0.000 (0.01)	0.000 (0.01)	-0.010 (-0.30)	-0.010 (-0.31)	-0.011 (-0.32)
Dividend Payer	-0.052*** (-13.83)	-0.052*** (-13.84)	-0.052*** (-13.81)	-0.047*** (-13.49)	-0.047*** (-13.51)	-0.047*** (-13.47)
Modified Z-Score	-0.057*** (-21.62)	-0.057*** (-21.58)	-0.057*** (-21.60)	-0.063*** (-21.83)	-0.063*** (-21.80)	-0.063*** (-21.81)
State GDP Growth	0.019 (0.77)	0.019 (0.72)	0.021 (0.82)	0.011 (0.44)	0.011 (0.41)	0.013 (0.48)
Year Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes
Firm Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes
Observations	81,162	81,162	81,162	65,202	65,202	65,202
Adjusted R <sup>2</sup>	0.698	0.698	0.698	0.718	0.718	0.718

**Table IX - (Continued)***Panel B: Dependent Variable is Market Leverage*

	Full Sample Period: 1967-1995			Sample Period: 1967-1991		
	Autor, Donohue, and Schwab (2006) (1)	Dertouzos and Karoly (1992) (2)	Morriss (1995) (3)	Autor, Donohue, and Schwab (2006) (4)	Dertouzos and Karoly (1992) (5)	Morriss (1995) (6)
Good Faith	-0.015*** (-2.89)	-0.013** (-2.45)	-0.016*** (-2.82)	-0.012** (-2.67)	-0.011** (-2.06)	-0.013** (-2.56)
Implied Contract	-0.002 (-0.57)	0.002 (0.44)	-0.002 (-0.49)	-0.003 (-0.76)	-0.001 (-0.16)	-0.002 (-0.62)
Public Policy	0.003 (0.75)	-0.002 (-0.67)	0.000 (0.01)	0.004 (1.00)	-0.001 (-0.31)	0.001 (0.30)
Log Assets	0.055*** (13.60)	0.055*** (13.64)	0.055*** (13.60)	0.058*** (12.75)	0.058*** (12.79)	0.058*** (12.74)
Market-to-Book	-0.042*** (-15.48)	-0.042*** (-15.49)	-0.042*** (-15.48)	-0.042*** (-18.06)	-0.042*** (-18.07)	-0.042*** (-18.05)
Return on Assets	-0.053* (-1.98)	-0.053* (-1.98)	-0.053* (-1.98)	-0.060* (-1.92)	-0.060* (-1.93)	-0.060* (-1.92)
Fixed Assets	0.187*** (11.98)	0.187*** (11.97)	0.187*** (11.97)	0.185*** (10.30)	0.185*** (10.30)	0.185*** (10.28)
Cash Flow Volatility	-0.079** (-2.06)	-0.080** (-2.07)	-0.079** (-2.06)	-0.128*** (-3.40)	-0.128*** (-3.40)	-0.128*** (-3.40)
Dividend Payer	-0.081*** (-19.30)	-0.081*** (-19.35)	-0.081*** (-19.30)	-0.078*** (-22.44)	-0.078*** (-22.49)	-0.078*** (-22.46)
Modified Z-Score	-0.049*** (-27.33)	-0.049*** (-27.37)	-0.049*** (-27.34)	-0.057*** (-23.92)	-0.057*** (-23.91)	-0.057*** (-23.88)
State GDP Growth	-0.231*** (-4.56)	-0.232*** (-4.21)	-0.230*** (-4.39)	-0.246*** (-5.14)	-0.246*** (-4.76)	-0.246*** (-4.95)
Year Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes
Firm Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes
Observations	81,162	81,162	81,162	65,202	65,202	65,202
Adjusted R <sup>2</sup>	0.727	0.727	0.727	0.737	0.737	0.737

**Table X**  
**Robustness: Alternative Dependent Variables and Sample Periods**

This table reports the results from OLS regressions relating financial leverage to the enactment of wrongful discharge laws for Compustat industrial firms. Variable definitions refer to Compustat designations where appropriate. The dependent variable in Model 1 is *Net Book Leverage*, which is the book value of long-term debt (*dltt*) plus debt in current liabilities (*dlc*) less book value of cash and short-term investments (*che*) divided by book value of assets (*at*). The dependent variable in Model 2 is *Net Market Leverage*, which is the book value of long-term debt (*dltt*) plus debt in current liabilities (*dlc*) less book value of cash and short-term investments (*che*) divided by market value of debt and equity (long-term debt (*dltt*) plus debt in current liabilities (*dlc*) plus market value of equity (*prcc\_f\*csho*)). The dependent variable in Model 3 is *Book Leverage with Leases*, which is the book value of long-term debt (*dltt*) plus debt in current liabilities (*dlc*) plus the value of leases (*xrent\*10*) divided by book value of assets (*at*) plus the value of leases (*xrent\*10*). The dependent variable in Model 4 is *Market Leverage with Leases*, which is the book value of long-term debt (*dltt*) plus debt in current liabilities (*dlc*) plus the value of leases (*xrent\*10*) divided by market value of debt and equity plus the value of leases (long-term debt (*dltt*) plus debt in current liabilities (*dlc*) plus market value of equity (*prcc\_f\*csho*) plus value of leases (*xrent\*10*)). In Models 3 and 4, all control variables are adjusted to account for the value of leases by adding the value of leases to the book value of debt and/or assets. The value of leases is obtained by capitalizing annual rental expenses (*xrent*) at a 10% discount rate. The dependent variable in Models 5 and 7 is *Book Leverage*, which is the book value of long-term debt plus debt in current liabilities divided by book value of assets. The dependent variable in Models 6 and 8 is *Market Leverage*, which is the book value of long-term debt plus debt in current liabilities divided by market value of assets. *Good Faith*, *Implied Contract*, and *Public Policy* are indicator variables set to one if the state where a firm is headquartered has passed the good faith exception, the implied contract exception, and the public policy exception by year *t* and zero otherwise, respectively. Models 1-4 use the full sample period from 1967 to 1995. Models 5 and 6 restrict the sample period to 1967-2003. Models 7 and 8 use the sample period from 1978 to 1999. All continuous variables are winsorized at their 1<sup>st</sup> and 99<sup>th</sup> percentiles, and dollar values are expressed in 2009 dollars. Standard errors are corrected for heteroskedasticity and clustering at the state level (t-statistics are in parentheses). \*, \*\*, and \*\*\* denote significance at the 10%, 5%, and 1% level, respectively.

	Full Sample Period: 1967-1995				Sample Period: 1967-2003		Sample Period: 1978-1999	
	Net Book Leverage	Net Market Leverage	Book Leverage with Leases	Market Leverage with Leases	Book Leverage	Market Leverage	Book Leverage	Market Leverage
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Good Faith	-0.029*** (-3.95)	-0.025*** (-4.07)	-0.016** (-2.57)	-0.014** (-2.63)	-0.014** (-2.33)	-0.011* (-1.86)	-0.026*** (-5.22)	-0.018*** (-3.56)
Implied Contract	-0.004 (-1.15)	0.000 (0.07)	-0.002 (-0.93)	-0.003 (-0.06)	-0.003 (-0.94)	-0.002 (-0.53)	-0.003 (-0.75)	-0.002 (-0.56)
Public Policy	0.002 (0.59)	0.002 (0.59)	0.003 (1.10)	0.003 (0.65)	0.005 (1.36)	0.005 (1.39)	0.001 (0.26)	0.001 (0.16)
Log Assets	0.052*** (13.44)	0.073*** (13.47)	0.045*** (16.94)	0.054*** (16.56)	0.045*** (19.81)	0.052*** (16.09)	0.052*** (17.08)	0.061*** (16.57)
Market-to-Book	-0.017*** (-9.91)	-0.008** (-2.47)	-0.011*** (-6.03)	-0.073*** (-32.42)	-0.005*** (-5.98)	-0.031*** (-9.93)	-0.007*** (-6.68)	-0.036*** (-11.26)
Return on Assets	0.092*** (4.23)	-0.011 (-0.32)	0.100*** (4.13)	-0.130*** (-4.86)	0.059*** (5.45)	-0.059*** (-4.23)	0.069*** (5.21)	-0.039** (-2.22)
Fixed Assets	0.565*** (19.91)	0.543*** (26.29)	-0.048** (-2.68)	-0.034* (-1.86)	0.199*** (14.58)	0.202*** (14.69)	0.212*** (14.98)	0.208*** (17.21)
Cash Flow Volatility	-0.042 (-0.97)	-0.136*** (-3.39)	-0.071 (-1.46)	-0.122** (-2.19)	0.045** (2.62)	-0.033 (-1.31)	0.052** (2.53)	-0.003 (-0.13)
Dividend Payer	-0.065*** (-13.88)	-0.086*** (-16.03)	-0.049*** (-14.87)	-0.075*** (-19.13)	-0.056*** (-16.62)	-0.083*** (-20.02)	-0.055*** (-13.18)	-0.075*** (-15.37)
Modified Z-Score	-0.056*** (-19.03)	-0.043*** (-22.70)	-0.077*** (-19.16)	-0.063*** (-21.01)	-0.037*** (-15.95)	-0.029*** (-14.54)	-0.040*** (-18.87)	-0.032*** (-19.81)
State GDP Growth	0.024 (0.69)	-0.172*** (-3.31)	0.009 (0.39)	-0.232*** (-4.09)	0.005 (0.23)	-0.259*** (-4.99)	-0.027 (-0.93)	-0.322*** (-4.51)
Year Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Firm Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	81,162	81,162	81,162	81,162	115,899	115,899	79,628	79,628
Adjusted R <sup>2</sup>	0.740	0.666	0.766	0.784	0.672	0.697	0.687	0.714

**Table XI**  
**Other Robustness Tests of the Main Specification**

This table reports the results from OLS regressions relating financial leverage to the enactment of wrongful discharge laws for Compustat industrial firms from 1967 to 1995. Variable definitions refer to Compustat designations where appropriate. The dependent variable in Panel A is *Book Leverage*, which is the book value of long-term debt plus debt in current liabilities divided by book value of assets. The dependent variable in Panel B is *Market Leverage*, which is the book value of long-term debt plus debt in current liabilities divided by market value of assets. *Good Faith*, *Implied Contract*, and *Public Policy* are indicator variables set to one if the state where a firm is headquartered has passed the good faith exception, the implied contract exception, and the public policy exception by year  $t$  and zero otherwise, respectively. Model 1 excludes all observations when a firm reports positive foreign income (*pifo*) or foreign taxes (*txfo*). Model 2 excludes all observations in which a firm is in a geographically dispersed industry. Dispersed industries include retail, wholesale, and transportation. Model 3 excludes all observations for firms that have moved their headquarters locations to different states in any of the years between 1992 and 2011. To identify firms that switch headquarters, I obtain each firm's state of headquarters information from their 10-K filings over the 1992 to 2011 period when it is available. If it is not available, I assume there were no relocations prior to the earliest date it is available. Model 4 excludes the same observations as in Model 3 and also excludes all observations for firms that have ever had a one-year increase in total assets (*at*) or total sales (*sale*) exceeding 100% in the years when I do not have headquarters data from 10-K filings. Model 5 restricts the sample to firms that have Compustat data available for every year over the 1967 to 1995 period. Table II provides definitions of control variables. All continuous variables are winsorized at their 1<sup>st</sup> and 99<sup>th</sup> percentiles, and dollar values are expressed in 2009 dollars. Standard errors are corrected for heteroskedasticity and clustering at the state level (t-statistics are in parentheses). \*, \*\*, and \*\*\* denote significance at the 10%, 5%, and 1% level, respectively.

*Panel A: Dependent Variable is Book Leverage*

	Exclude if firm has positive foreign income or foreign taxes	Exclude firms in dispersed industries	Exclude if firm switches headquarters over 1992-2011	Exclude if firm switches headquarters over 1992-2011 or if growth exceeds 100%	Keep if firm survived entire 1967 to 1995 period
	(1)	(2)	(3)	(4)	(5)
Good Faith	-0.017** (-2.39)	-0.017** (-2.68)	-0.016*** (-2.74)	-0.015** (-2.10)	-0.043*** (-4.00)
Implied Contract	-0.003 (-0.74)	-0.004 (-1.19)	-0.002 (-0.89)	-0.001 (-0.40)	-0.005 (-0.66)
Public Policy	-0.002 (-0.49)	0.002 (0.56)	0.004 (1.49)	0.003 (0.92)	-0.006 (-0.61)
Log Assets	0.049*** (12.55)	0.048*** (18.09)	0.046*** (14.09)	0.035*** (9.35)	0.022** (2.57)
Market-to-Book	-0.006*** (-3.69)	-0.005*** (-3.34)	-0.006*** (-3.81)	-0.001 (-0.55)	-0.001 (-0.28)
Return on Assets	0.079*** (4.81)	0.093*** (5.36)	0.103*** (5.97)	0.119*** (4.74)	0.105 (1.28)
Fixed Assets	0.214*** (10.10)	0.193*** (11.15)	0.184*** (11.89)	0.154*** (9.14)	0.026 (0.58)
Cash Flow Volatility	0.014 (0.41)	0.026 (0.72)	0.018 (0.65)	-0.070*** (-2.91)	0.085 (0.69)
Dividend Payer	-0.053*** (-13.36)	-0.051*** (-14.34)	-0.050*** (-12.46)	-0.045*** (-10.30)	-0.035*** (-3.04)
Modified Z-Score	-0.051*** (-22.36)	-0.055*** (-18.82)	-0.058*** (-22.37)	-0.077*** (-22.33)	-0.076*** (-4.93)
State GDP Growth	0.014 (0.48)	0.023 (0.79)	0.025 (0.91)	0.042** (2.03)	0.014 (0.25)
Year Fixed Effects	Yes	Yes	Yes	Yes	Yes
Firm Fixed Effects	Yes	Yes	Yes	Yes	Yes
Observations	58,285	65,950	75,037	55,374	9,512
Adjusted R <sup>2</sup>	0.701	0.690	0.700	0.748	0.616

**Table XI - (Continued)***Panel B: Dependent Variable is Market Leverage*

	Exclude if firm has positive foreign income or foreign taxes	Exclude firms in dispersed industries	Exclude if firm switches headquarters over 1992-2011	Exclude if firm switches headquarters over 1992-2011 or if growth exceeds 100%	Keep if firm survived entire 1967 to 1995 period
	(1)	(2)	(3)	(4)	(5)
Good Faith	-0.015** (-2.32)	-0.015** (-2.44)	-0.014** (-2.42)	-0.016*** (-2.97)	-0.043*** (-2.93)
Implied Contract	-0.003 (-0.84)	-0.001 (-0.28)	-0.002 (-0.42)	-0.001 (-0.31)	0.005 (0.49)
Public Policy	-0.003 (-0.60)	0.002 (0.48)	0.004 (1.23)	0.002 (0.74)	-0.011 (-1.38)
Log Assets	0.058*** (12.36)	0.056*** (16.26)	0.055*** (12.72)	0.042*** (7.48)	0.035*** (4.61)
Market-to-Book	-0.042*** (-13.55)	-0.039*** (-15.12)	-0.041*** (-16.23)	-0.043*** (-16.07)	-0.029*** (-4.84)
Return on Assets	-0.052** (-2.05)	-0.042 (-1.56)	-0.052* (-1.87)	-0.099*** (-2.94)	-0.354*** (-4.04)
Fixed Assets	0.204*** (10.30)	0.174*** (9.80)	0.183*** (12.38)	0.177*** (8.78)	0.057 (1.01)
Cash Flow Volatility	-0.057 (-1.53)	-0.041 (-1.09)	-0.075** (-2.11)	-0.264*** (-5.34)	0.064 (0.41)
Dividend Payer	-0.080*** (-17.49)	-0.079*** (-18.81)	-0.080*** (-18.55)	-0.073*** (-15.47)	-0.083*** (-6.75)
Modified Z-Score	-0.044*** (-25.47)	-0.048*** (-21.61)	-0.051*** (-29.23)	-0.069*** (-21.70)	-0.052*** (-4.40)
State GDP Growth	-0.232*** (-4.48)	-0.242*** (-3.95)	-0.224** (-4.34)	-0.158*** (-3.88)	-0.209** (-2.18)
Year Fixed Effects	Yes	Yes	Yes	Yes	Yes
Firm Fixed Effects	Yes	Yes	Yes	Yes	Yes
Observations	58,285	65,950	75,037	55,374	9,512
Adjusted R <sup>2</sup>	0.730	0.719	0.729	0.752	0.670

**Table XII**  
**Wrongful Discharge Laws and Cash Holdings**

This table reports the results from OLS regressions relating cash holdings to the enactment of wrongful discharge laws for Compustat industrial firms from 1967 to 1995. Variable definitions refer to Compustat designations where appropriate. The dependent variable in Model 1 is *Log Cash Holdings*, which is the natural logarithm of the book value of cash and short-term investments (*che*) divided by book value of assets (*at*). The dependent variable in Model 2 is *Log Net Cash Holdings*, which is the natural logarithm of the book value of cash and short-term investments (*che*) divided by book value of assets (*at*) less the book value of cash and short-term investments (*che*). *Good Faith*, *Implied Contract*, and *Public Policy* are indicator variables set to one if the state where a firm is headquartered has passed the good faith exception, the implied contract exception, and the public policy exception by year *t* and zero otherwise, respectively. *Market-to-Book* is market value of assets (book assets (*at*) plus market value of equity (*prcc\_f\*csho*) minus book value of equity (*ceq*)) divided by book value of assets (*at*). *Log Assets* is the natural logarithm of book value of assets (*at*). *Return on Assets* is operating income before depreciation (*oibdp*) divided by book value of assets (*at*). *Net Working Capital* is working capital (*wcap*) less cash and short-term investments (*che*) divided by book value of assets (*at*). *Capital Expenditures* is capital expenditures (*capx*) divided by book value of assets (*at*). *Book Leverage* is book value of long-term debt (*dltt*) plus debt in current liabilities (*dlc*) divided by book value of assets (*at*). *Industry Cash Flow Volatility* is the median of the standard deviations of operating income before depreciation (*oibdp*) divided by book value of assets (*at*) over the previous twenty years for firms in the same two-digit SIC industries (at least three years of data are required). *R&D Expenditures* is R&D expenses (*xrd*) divided by sales (*sale*). *Dividend Payer* is an indicator variable set to one if a firm pays a common dividend (*dvc*) during a fiscal year and zero otherwise. All continuous variables are winsorized at their 1<sup>st</sup> and 99<sup>th</sup> percentiles, and dollar values are expressed in 2009 dollars. Standard errors are corrected for heteroskedasticity and clustering at the state level (t-statistics are in parentheses). \*, \*\*, and \*\*\* denote significance at the 10%, 5%, and 1% level, respectively.

	Log Cash Holdings (1)	Log Net Cash Holdings (2)
Good Faith	0.121*** (4.03)	0.129*** (3.91)
Implied Contract	0.019 (0.66)	0.019 (0.62)
Public Policy	-0.002 (-0.08)	-0.001 (-0.05)
Market-to-Book	0.068*** (11.95)	0.079*** (12.35)
Log Assets	-0.024 (-0.95)	-0.023 (-0.77)
Return on Assets	0.645*** (10.38)	0.731*** (11.62)
Net Working Capital	-1.657*** (-17.14)	-1.966*** (-18.21)
Capital Expenditures	-1.453*** (-12.75)	-1.785*** (-13.87)
Book Leverage	-2.320*** (-22.49)	-2.638*** (-22.71)
Industry Cash Flow Volatility	1.106** (2.52)	0.988* (1.99)
R&D Expenditures	0.711*** (8.85)	0.945*** (10.35)
Dividend Payer	0.025 (0.97)	0.027 (0.94)
Year Fixed Effects	Yes	Yes
Firm Fixed Effects	Yes	Yes
Observations	79,823	79,823
Adjusted R <sup>2</sup>	0.600	0.626

**Table XIII**  
**Wrongful Discharge Laws and the Cash Flow Sensitivity of Cash**

This table reports the results from OLS regressions relating change in cash holdings to the enactment of wrongful discharge laws for Compustat industrial firms from 1967 to 1995. Variable definitions refer to Compustat designations where appropriate. The dependent variable in Models 1 and 2 is *Change in Cash Holdings*, which is the change in book value of cash and short-term investments (*che*) over the previous year divided by the beginning of year book value of assets (*at*). *Good Faith*, *Implied Contract*, and *Public Policy* are indicator variables set to one if the state where a firm is headquartered has passed the good faith exception, the implied contract exception, and the public policy exception by year *t* and zero otherwise, respectively. *Cash Flow* is operating income before depreciation (*oibdp*) less the value of common and preferred dividends (*dvc+divp*) all divided by book value of assets (*at*). *Market-to-Book* is the market value of assets (long-term debt (*dltt*) plus debt in current liabilities (*dli*) plus market value of equity (*prcc\_f\*cscho*) plus value of preferred stock (*pstkrv*) minus deferred taxes and investment tax credit (*txditi*) divided by book value of assets (*at*). *Capital Expenditures* is capital expenditures (*capx*) divided by book value of assets (*at*). *Change in Net Working Capital* is the change in net working capital (*wcap-che*) over the previous year divided by the beginning of year book value of assets (*at*). *Net Debt Issuance* is long-term debt issuance (*dltis*) less long-term debt reduction (*dltr*) divided by book value of assets (*at*). *Acquisition Expenses* is acquisition expenses (*aqc*) divided by book value of assets (*at*). All continuous variables are winsorized at their 1<sup>st</sup> and 99<sup>th</sup> percentiles, and dollar values are expressed in 2009 dollars. Standard errors are corrected for heteroskedasticity and clustering at the state level (t-statistics are in parentheses). \*, \*\*, and \*\*\* denote significance at the 10%, 5%, and 1% level, respectively.

	Change in Cash Holdings	
	(1)	(2)
Cash Flow	0.277*** (20.69)	0.286*** (20.54)
Cash Flow * Good Faith	0.061** (2.07)	0.052* (1.82)
Good Faith	-0.005 (-1.51)	-0.005 (-1.58)
Implied Contract	0.001 (0.72)	0.001 (0.53)
Public Policy	0.003* (1.89)	0.003 (1.47)
Market-to-Book	0.020*** (10.86)	0.021*** (12.49)
Log Assets	0.012*** (4.49)	0.016*** (5.20)
Capital Expenditures	-0.472*** (-16.87)	-0.533*** (-16.27)
Change in Net Working Capital	-0.198*** (-19.55)	-0.208*** (-18.79)
Net Debt Issuance	0.218*** (20.88)	0.269*** (20.67)
Acquisition Expenses		-0.422*** (-14.15)
Year Fixed Effects	Yes	Yes
Firm Fixed Effects	Yes	Yes
Observations	80,202	71,833
Adjusted R <sup>2</sup>	0.186	0.203

**Table XIV**  
**Wrongful Discharge Laws and the Marginal Value of Cash**

This table reports the results from OLS regressions relating the marginal value of cash to the enactment of wrongful discharge laws for Compustat industrial firms from 1967 to 1995. Variable definitions refer to Compustat designations where appropriate. The dependent variable in Models 1 and 2 is *Size and Book-to-Market Adjusted Abnormal Returns*, which is the firm's annual stock return less the annual return of an equally-weighted benchmark portfolio matched on size and the book-to-market ratio. *Good Faith*, *Implied Contract*, and *Public Policy* are indicator variables set to one if the state where a firm is headquartered has passed the good faith exception, the implied contract exception, and the public policy exception by year  $t$  and zero otherwise, respectively. The firm-level independent variables are: *Cash Holdings* (cash and short term investments ( $che$ )), *Earnings* (earnings before extraordinary items ( $ibc$ ) plus interest ( $xint$ ), deferred tax credits ( $txdi$ ), and investment tax credits ( $itci$ )), *Net Assets* (total assets minus cash holdings ( $at-che$ )), *R&D Expenditures* ( $xrd$ ), *Interest Expense* ( $xint$ ), *Dividends* (common dividends paid ( $dvc$ )), *Market Leverage* (total debt ( $dltt+dle$ ) divided by total debt plus the market value of equity ( $dltt+dle+prcc_f*cshe$ )), and *Net Financing* (total equity issuance ( $sstk$ ) minus repurchases ( $prstk$ ) plus debt issuance ( $dltis$ ) minus debt redemption ( $dltr$ )). These independent variables, except leverage, are divided by the lagged market value of equity. Changes are calculated from year  $t-1$  to  $t$ . All continuous variables are winsorized at their 1<sup>st</sup> and 99<sup>th</sup> percentiles, and dollar values are expressed in 2009 dollars. Standard errors are corrected for heteroskedasticity and clustering at the state level (t-statistics are in parentheses). \*, \*\*, and \*\*\* denote significance at the 10%, 5%, and 1% level, respectively.

	Size and Book-to-Market Adjusted Abnormal Returns	
	(1)	(2)
Change in Cash Holdings	0.669*** (23.73)	1.063*** (23.16)
Change in Cash Holdings * Good Faith	0.165*** (2.69)	0.092* (1.93)
Good Faith	-0.009 (-0.66)	-0.009 (-0.63)
Implied Contract	0.020* (1.77)	0.020* (1.74)
Public Policy	0.006 (0.74)	0.006 (0.83)
Change in Earnings	0.400*** (23.24)	0.400*** (23.89)
Change in Net Assets	0.136*** (23.20)	0.139*** (23.38)
Change in R&D Expenditures	0.328 (1.28)	0.309 (1.21)
Change in Interest Expense	-1.141*** (-16.94)	-1.120*** (-16.74)
Change in Dividends	1.465*** (5.23)	1.386*** (4.89)
Lagged Cash Holdings	0.633*** (25.80)	0.611*** (25.15)
Market Leverage	-0.562*** (-21.99)	-0.555*** (-21.97)
Net Financing	-0.004 (-0.29)	-0.016 (-1.07)
Change in Cash Holdings * Lagged Cash Holdings		-0.329*** (-6.43)
Change in Cash Holdings * Market Leverage		-0.628*** (-7.63)
Year Fixed Effects	Yes	Yes
Firm Fixed Effects	Yes	Yes
Observations	70,137	70,137
Adjusted R <sup>2</sup>	0.195	0.191