The Regressive Effects of Worker Protection: The Role of Financial Constraints

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Abstract

I exploit the staggered adoption of U.S. state-level Employment Protection Legislation (EPL) to study its effects on firm profits and the wage bill. I find that EPL has unintended regressive consequences. EPL harms smaller firms and their workers, while only benefiting larger firms and their workers. These effects operate through a credit channel: EPL limits access to credit for smaller firms, forcing them to cut employment and even exit the market. Conversely, larger firms expand employment by issuing more debt while benefiting from lower competition. A model with heterogeneous firms and endogenous financial constraints guides the empirical analysis.

Keywords: EPL, financial constraints, firm profits, wage bill.

JEL: G32, J08, J63, K31

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1 Introduction

The inherent asymmetric relationship between employers and employees forms the foundation for labor regulations (Botero et al., 2004). In particular, Employment Protection Legislation (EPL) aims to shield workers from unfair dismissal by imposing termination requirements, including severance payments, notice periods, and reinstatement. However, the intended benefits of EPL may not materialize if firms struggle to absorb the higher labor costs. In such cases, firms may resort to cost-cutting measures like reducing hiring or lowering wages (Autor et al., 2006, 2007), ultimately harming workers.

The ability of firms to absorb unanticipated shocks, such as increased labor costs, is often constrained by their access to credit (Benmelech et al., 2019; Mehrotra and Sergeyev, 2021), which in turn is positively related to firm size (Hadlock and Pierce, 2010). This raises the questions: Does labor protection disproportionately harm the small-scale sector? Is there a role for firm financial constraints?

Although the finance literature documents that EPL distorts firm decisions by constraining access to external capital (Simintzi et al., 2015; Serfling, 2016; Caggese et al., 2019; Bai et al., 2020), the role of financial constraints in shaping the effectiveness of EPL remains largely unexplored. This paper addresses this gap from a theoretical and an empirical perspective. The main finding is that the EPL-finance interaction leads to unintended regressive consequences: EPL reduces profits and wage bills in smaller firms while benefiting larger firms and their workers.

To guide the empirical analysis, I first build a model in which agents differ by their wealth (assets) and choose whether to become workers or to invest in a firm and become entrepreneurs. Investment decisions are constrained by endogenous credit limits that depend positively on assets but negatively on the strength of EPL. The model captures well-documented empirical findings from the labor-finance literature: EPL crowds out external finance (Simintzi et al., 2015; Serfling, 2016), decreasing employment (Autor et al., 2006, 2007), discouraging investment (Bai et al., 2020), and raising debt costs (Alimov, 2015).

The model delivers two novel testable hypotheses. First, strengthening EPL reduces profits and the wage bill in smaller firms but benefits larger firms and their workers. Second, these effects operate through a credit channel: EPL limits access to credit for smaller firms, forcing them to cut employment, investment, and even exit the market. Perhaps surprisingly, larger firms expand operations due to reduced competition in the credit and output markets.

To test the model's predictions, I exploit the staggered adoption of the *implied contract exception* to "at-will employment" by U.S. states from 1967 to 1995. Historically, at-will employment allowed employers to terminate employees without notice or legal liability. From the 1960s to 1990s, several state courts adopted three common law exceptions to at-will employment, known as Wrongful Discharge Laws (WDLs).[1] This paper focuses on the *implied contract exception*, which establishes that firms can only dismiss workers for good cause. Unlike other WDLs, this law has been shown to have economically significant effects on employment and a broader application (Autor et al., 2006).

In this paper, I use the staggered enactment of the *implied contract exception* to identify the causal effect of improved EPL on firm profits and wage bills. I implement a triple-differences design for Compustat firms. Treated and control groups consist of firms with different sizes in states that have and have not passed the exception. The empirical analysis focuses on firm profits, employment, investment, and debt, which are universally reported in Compustat. The wage bill analysis is limited by data availability, as only 12% of firms report this measure. While suggestive, the wage bill results are consistent with the model's predictions.

The empirical analysis supports the model's first hypothesis that EPL has unintended regressive effects across firms. After the *implied contract exception* adoption, profits fall by 24% relative to the mean for firms at the 25th percentile of assets and rise by 8.5% at the 75th percentile. These results remain robust when controlling for standard firm-level characteristics from the labor-finance literature and state-level economic and political factors. Alternatively, I include state-year fixed effects to account for any state-year omitted variables.

To test the model's theoretical mechanism, I employ four financial constraints measures used

[1]WDLs include the *implied contract*, *good faith*, and *public policy* exceptions (see Section 4 for more details).

in related studies (e.g., Ellul and Pagano, 2019; Bai et al., 2020): the Hadlock and Pierce (2010), Kaplan and Zingales (1997), Whited and Wu (2006) indices, and an indicator for non-dividend payers. I examine the impact of the *implied contract exception* on employment, investment, debt, the cost of debt, exit, and entry conditional on pre-regulatory financial constraints.

As predicted by the model, more financially constrained firms—those above the 35th percentile of financial constraints—reduce employment and debt after the *implied contract exception* adoption, while their exit rates rise by $1 - 2.5\%$. This suggests that their profits losses stem from EPL limiting credit access, forcing them to cut employment. Conversely, less constrained firms expand employment by issuing more debt. Potentially, they benefit from lower competition due to significantly higher exit rates among smaller firms without any effect on entry. The effects of EPL on investment and debt costs are weaker but consistent with larger firms facing lower debt costs and increasing investment.

For the wage bill, the *implied contract exception* has a significant and negative impact on smaller firms only after two years of adoption. In contrast, the *good faith exception* reduces the wage bill by 6% at 25th percentile of size in the year of adoption, while it raises it by 31% at the 75th percentile. Employment contracts by 2.6% at the 25th percentile while it expands it by 37% at the 75th percentile. A back-of-the-envelope calculation suggests that the *good faith exception* reduces wages by $3.5 - 6\%$.

The crucial assumption for a causal interpretation of these results is that, in the absence of EPL adoption, the change in profits and the wage bill across firms with different sizes would have been the same for both treated and non-treated firms. Many features of WDLs identified in the literature and several robustness tests suggest that this common-trend assumption holds.

A first concern is reverse causality: if "at-will employment" allows firms—especially smaller, constrained ones—to offset profit declines via dismissal, courts may respond by adopting WDLs. Smaller firms would then show larger declines in profits and wage bills before the *implied contract exception* adoption. To test for possible pre-existing trends, I follow Bertrand and Mullainathan (2003) and examine the timing of changes in profits and wage bills across firms of different sizes.

Profits and the wage bill decline more in smaller firms only after EPL enactment, suggesting that the main results do not suffer from reverse causality.

Second, the *implied contract exception* and the dependent variables may spuriously correlate with fundamental economic and political forces. Thus, I control for additional factors possibly affecting WDL adoption, including political leaning, unionization rates, other state-level labor laws (Serfling, 2016), and WDL adoption within the same federal circuit (Bird and Smythe, 2008).

Third, the gradual and staggered adoption of EPL partially mitigates treatment-control groups differences, as firms can be in both groups. To further address these concerns, I show that the results are robust to propensity score matching based on a large set of firm characteristics. I also account for potential firm relocation by supplementing Compustat with historical headquarters data. Overall, the main findings are robust to various econometric concerns.

Finally, I replicate the analysis using the *good faith exception* adoption, which has been used in the labor-finance literature to explore the effects of EPL on firm debt and growth (Serfling, 2016; Bai et al., 2020). This exception also reduces profits in smaller firms while raising them in larger firms. The evidence remains consistent with the model's predictions that EPL crowds out credit in smaller firms but expands it in larger firms. However, employment effects are weaker, though moderate evidence suggests that investment falls in smaller firms and expands in larger firms, explaining the effects on profits. These more mixed results may reflect the exception's narrower and more heterogeneous application across states and over time (Autor et al., 2006, 2007).

This paper contributes to four strands of literature. The first strand examines how EPL affects various corporate decisions such as leverage, investment, and innovation through a financial channel (Simintzi et al., 2015; Serfling, 2016; Alimov, 2015; Caggese et al., 2019; Bai et al., 2020; Acharya et al., 2014; Griffith and Macartney, 2014; Bena et al., 2022; Dang et al., 2021; Fairhurst et al., 2020; Li et al., 2023; Cui et al., 2018; Karpuz et al., 2020; Beuselinck et al., 2021).[2] Many of these papers exploit the adoption of WDLs.[3]

[2]This article also relates to the literature on the impact of financial constraints on firms' employment. See, for instance, Pagano and Pica (2012); Chodorow-Reich (2014); Duygan-Bump et al. (2015); Benmelech et al. (2021); Mehrotra and Sergeyev (2021); Fonseca and Van Doornik (2022).

[3]Papers exploring the impact of WDLs on various labor market outcomes include Dertouzos et al. (1988); Der-

Second, a growing literature examines the redistributive effects of different labor regulations, such as minimum wages (Derenoncourt and Montialoux, 2021; Engbom and Moser, 2022; Dustmann et al., 2022; Vergara, 2023; Berger et al., 2025), unions (Knepper, 2020; Farber et al., 2021; Dodini et al., 2023, 2024), and partial EPL reforms (e.g., Bratti et al., 2021; Jiménez and Rendon, 2023; Daruich et al., 2023; Micco and Muñoz, 2024). This article contributes to these first two strands by showing that the interplay between financial constraints and EPL is a key channel determining the effectiveness of EPL and inducing size-contingent distortions. The EPL-finance interaction emerges as a promising avenue for future research on the misallocation effects of EPL.

Third, this paper adds to the political economy literature on labor policies. Botero et al. (2004) argue that labor regulations respond to economic interest groups. Papers that formalize this idea include Pagano and Volpin (2005), Perotti and von Thadden (2006), and Fischer and Huerta (2021). This article contributes to this literature by providing empirical evidence for the existence of such interest groups, as EPL has differential effects across groups of firms and workers.

Finally, this paper provides empirical support for the widespread use of size-contingent EPL, which applies softer regulations to smaller firms. This policy has received significant attention in the quantitative macro literature (Gourio and Roys, 2014; Garicano et al., 2016; Aghion et al., 2023) and political economy literature (Boeri and Jimeno, 2005; Huerta, 2024). The firm-dependent distortions that originate from financial frictions represent a fruitful area for future research on the determinants and distributional effects of various size-contingent regulations. Examples include special tax treatments, subsidized credit, and restrictions on business expansion.

The paper is organized as follows. Section 2 presents the model. Section 3 derives the testable predictions. Section 4 outlines WDLs' institutional background. Section 5 describes the data and empirical methodology. Section 6 shows the main empirical analysis for firm profits. Section 7 tests the mechanisms. Section 8 explores the effects on the wage bill. Section 9 discusses econometric concerns and reports robustness tests. Section 10 concludes.

touzos and Karoly (1992); Miles (2000); Autor (2003); Autor et al. (2006); Johnson et al. (2024). Papers studying the impact of other types of labor regulations on firms' corporate decisions include Agrawal and Matsa (2013); Chava et al. (2020); Ellul and Pagano (2019); Jeffers (2024).

2 The Model

This section describes the model. I build on the setting developed by Fischer and Huerta (2021), which incorporates endogenous financial constraints, occupational choice, and firms' heterogeneity in labor and capital in a tractable way.

Citizens are heterogeneous in wealth (assets) and are endowed with one unit of labor. The wealth distribution function is continuously differentiable and given by $g(a) : [a_m, a_M]$, with $a_m < 0 < a_M$ and mean $A > 0$. The cumulative wealth distribution is denoted by $G(a)$. Agents choose to be either workers or entrepreneurs. Entrepreneurs operate a Cobb-Douglas production technology that uses capital k and labor l: $f(k, l) = k^{\alpha} l^{\beta}$, with $\alpha + \beta < 1$. Workers supply their unit of labor inelastically. Agents are price takers in both the capital and labor markets, with prices ρ and w, respectively. The price of the single good is normalized to one.

2.1 Timeline

The single period is divided into three stages (see Figure 1). In what follows, I describe the events that take place at each stage.

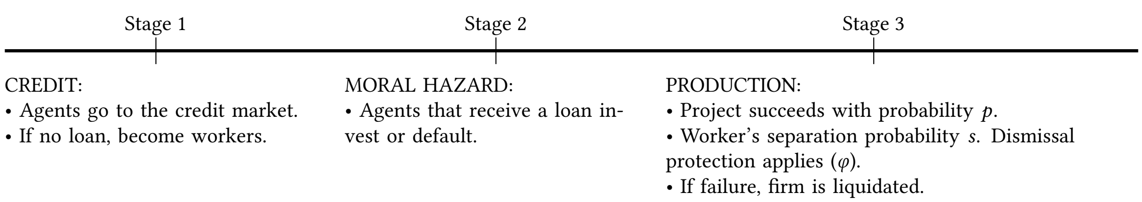

Figure 1: Timing.

2.1.1 Stage 1: Credit

A competitive banking system, with unlimited access to international funds at the fixed interest rate ρ, provides credit to potential entrepreneurs. Due to credit market imperfections, banks impose three types of credit constraints: a minimum collateral for a loan ($\underline{a}$), asset-based debt limits ($d(a)$), and differentiated interest rates ($r(a)$). Section 2.3 characterizes these credit constraints. Excluded agents become workers ($a < \underline{a}$), while the rest obtain credit to invest in a firm ($a \geq \underline{a}$).

2.1.2 Stage 2: Moral Hazard

Banks provide credit to entrepreneurs while facing a moral hazard problem: investment decisions are not contractible, and banks are imperfectly protected against default. Borrowers ($a \geq \underline{a}$) can either honor the credit contract and invest in a firm or default to finance private consumption. In the latter case, the legal system recovers only a fraction $1-\phi$ of the capital, where $1-\phi$ represents the loan recovery rate or the strength of creditor rights.[4]

2.1.3 Stage 3: Production

Entrepreneurs use their own labor to manage the firm, and thus must hire labor from workers for production. Firms succeed with probability $p \in (0,1)$, producing $f(k,(1-s)l)$ units of output, where $s \in [0,1]$ is an exogenous job separation probability. Thus, $(1-s)l$ is the "effective" labor employed by a firm that hires l units of labor. When a worker is fired, with probability s, entrepreneurs must pay her a fraction φ of her labor income wl. Hence, φ captures the strength of EPL. With probability $1-p$, production fails. In that case, the firm is liquidated and only a fraction η of total invested capital k is recovered, which is then used to repay banks.

2.2 Payoffs

Expected banks' profits from lending d at the interest rate r to an entrepreneur with assets a are:

$$\Pi^B(a,d) = p(1+r)d + (1-p)\eta(a+d) - (1+\rho)d. \tag{2.1}$$

Firm profits of such an entrepreneur are given by:

$$\Pi^E(a,d,l) = p[f(a+d,(1-s)l) - (1-s)wl - s\varphi wl - (1+r)d], \tag{2.2}$$

[4] Fischer et al. (2019) develop a model with a similar financial structure where the amount recovered by the legal system is a general function of ϕ and debt. The qualitative predictions of the model would not change under this more general specification.

while the expected wage bill in that firm is:

$$\Pi^W(l) = p((1-s)+s\varphi)w \cdot l = \bar{w} \cdot (1-s)l, \tag{2.3}$$

where $\bar{w} \equiv \frac{p[1-s(1-\varphi)]\cdot w}{1-s}$ is the expected labor payment per effective units of labor, referred to as *expected wage* for simplicity. Workers deposit their wealth, and thus obtain: $\Pi^W + (1+\rho)a$.

The *actual wage bill*, $w \cdot l$, serves as the closest counterpart to the wage bill data in Compustat. Although in the model dismissal costs are paid every period, in practice, the introduction of WDLs may not trigger immediate lawsuits against firms. However, the mere threat of such a lawsuits can deter hiring and terminations, affecting employment, wages, and thus the wage bill.

2.3 Equilibrium

This section describes the equilibrium given the strength of EPL, φ. Sections 2.3.1 and 2.3.2 describe banks' and entrepreneurs' decisions taking as given w, while Section 2.3.3 defines w.

2.3.1 Banks' decisions

Imposing the zero profit condition, equation (2.1) gives the interest rate charged to an entrepreneur with wealth a who borrows d:

$$1 + r(a) = \frac{1}{p}\left(1 + \rho - (1-p)\eta\left(1 + \frac{a}{d}\right)\right). \tag{2.4}$$

Banks charge differentiated interest rates, $r \equiv r(a)$, because in case of firm failure the loss they incur depends on the share of investment financed with debt.

Replacing (2.4) in (2.2), gives firm profits as a function of prices, assets, debt, and labor:

$$\Pi^E(a,d,l) = p(a+d)^{\alpha}\left((1-s)l\right)^{\beta} - \bar{w}(1-s)l - R(a+d) + (1+\rho)a, \tag{2.5}$$

where $R \equiv 1 + \rho - (1-p)\eta$ is the effective gross cost of capital.

2.3.2 Entrepreneurs' decisions

The entrepreneur's problem reads as:

$$\max_{d,l} \Pi^E(a,d,l)$$

$$s.t.\ \ \Pi^E(a,d,l) \geq \bar{w}(1-s) + (1+\rho)a, \tag{2.6}$$

$$\Pi^E(a,d,l) \geq \phi(a+d), \tag{2.7}$$

where (2.6) and (2.7) are the occupational and incentive compatibility constraints, respectively. Condition (2.6) asks that the agent prefers to form a firm instead of becoming a worker, while (2.7) states that the entrepreneur does not have incentives to default with the loan.[5]

Labor decisions are independent of both constraints. Thus, all entrepreneurs hire labor optimally according to their investment scale, $k = a + d$:

$$(1-s)l = \left(p\frac{\beta}{\bar{w}}(a+d)^{\alpha}\right)^{\frac{1}{1-\beta}}. \tag{2.8}$$

This condition allows me to write profits in terms of assets a and debt d, leading to Lemma 1:

$$\Pi^E(a,d) = (1-\beta)p^{\frac{1}{1-\beta}}\left(\frac{\beta}{\bar{w}}\right)^{\frac{\beta}{1-\beta}}(a+d)^{\frac{\alpha}{1-\beta}} - R(a+d) + (1+\rho)a. \tag{2.9}$$

Lemma 1

1. *There is a minimum collateral requirement to obtain credit ($\underline{a}$) and a minimum wealth to obtain a loan to operate efficiently ($\overline{a} > \underline{a}$), given by:*

$$\underline{a} = -\frac{1-\alpha-\beta}{1+\rho}p^{\frac{1}{1-\alpha-\beta}}\left(\frac{\alpha}{R+\phi}\right)^{\frac{\alpha}{1-\alpha-\beta}}\left(\frac{\beta}{\bar{w}}\right)^{\frac{\beta}{1-\alpha-\beta}} \tag{2.10}$$

$$\overline{a} = \frac{\frac{\alpha\phi}{R} - (1-\alpha-\beta)}{1+\rho}p^{\frac{1}{1-\alpha-\beta}}\left(\frac{\alpha}{R}\right)^{\frac{\alpha}{1-\alpha-\beta}}\left(\frac{\beta}{\bar{w}}\right)^{\frac{\beta}{1-\alpha-\beta}} \tag{2.11}$$

[5] Condition (2.7) implies that debt limits depend endogenously on firms' profits. This modeling approach aligns with the findings of Lian and Ma (2021) which indicate that firms' debt is predominantly cash-based in the US.

2. *Agents with $a < \underline{a}$ become workers, while those with $a \in [\underline{a}, \overline{a})$ operate inefficient firms asking for their maximum allowable debt, which is implicitly given by:*

$$\Pi^E(a, d) = \phi(a + d) \tag{2.12}$$

3. *Agents with $a \in [\overline{a}, k^*)$ ask for a loan $d = k^* - a$ and operate at the efficient scale:*

$$k^* = p^{\frac{1}{1-\alpha-\beta}} \left(\frac{\alpha}{R}\right)^{\frac{1-\beta}{1-\alpha-\beta}} \left(\frac{\beta}{\bar{w}}\right)^{\frac{\beta}{1-\alpha-\beta}} \tag{2.13}$$

$$(1-s)l^* = p^{\frac{1}{1-\alpha-\beta}} \left(\frac{\alpha}{R}\right)^{\frac{\alpha}{1-\alpha-\beta}} \left(\frac{\beta}{\bar{w}}\right)^{\frac{1+\frac{\alpha\beta}{1-\alpha-\beta}}{1-\beta}} \tag{2.14}$$

4. *Agents with $a \geq k^*$ self-finance an efficient firm and deposit $a - k^*$ in the banking system.*

Lemma 1 shows that two wealth thresholds define credit constraints on the extensive margin: a minimum wealth required for a loan ($\underline{a}$), and a wealth cutoff ($\overline{a} > \underline{a}$) to obtain a loan to invest efficiently. Agents are endogenously classified into four groups, (1) those with $a < \underline{a}$ become workers and deposit their wealth; (2) financially constrained agents, $a \in [\underline{a}, \overline{a})$, request their maximum allowable loan and form inefficient firms; (3) those with $a \in [\overline{a}, k^*)$ obtain an optimal loan and form an efficient firm; and (4) rich agents with $a > k^*$ self-finance an optimal firm and deposit the rest of their wealth. Figure 2 summarizes these features.[6]

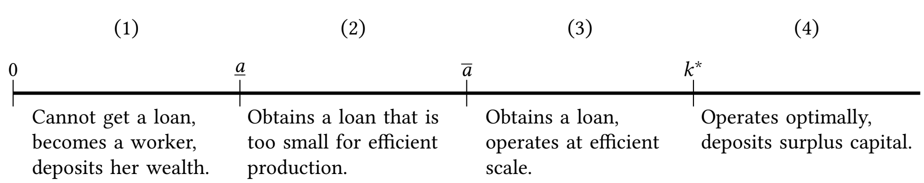

Figure 2: Agents' choices as a function of wealth.

[6]The model abstracts from equity issuance, despite the empirical focus on public firms. This clarifies the mechanism and is justified because: (i) equity is used for major adjustments, while debt is used for marginal financing decisions (*pecking order*, Myers and Majluf, 1984), smoothing shocks and funding operations (Benmelech et al., 2019; Mehrotra and Sergeyev, 2021); (ii) equity is costly due to dispersed shareholders and strong moral hazard (Jensen and Meckling, 2019; Hadlock and James, 2002), making it an imperfect substitute for debt; and (iii) EPL adversely affects firms through a debt channel (Simintzi et al., 2015; Serfling, 2016; Caggese et al., 2019; Bai et al., 2020).

2.3.3 Equilibrium wage

The labor market equilibrium wage w arises from:

$$G(\underline{a}) = \int_{\underline{a}}^{\overline{a}} l \, g(a)\partial a + l^*(1 - G(\overline{a})), \tag{2.15}$$

where the left-hand side is total labor supply and the right-hand side is the labor demand.

2.4 Discussion: Modeling dismissal protection

A key modeling choice is to treat dismissal protection as a proportional tax on labor income owed to workers. This labor market friction acts as a reduced-form tax on size that depresses labor demand. Thus, the theoretical results extend to any labor-suppressing policy, such as payroll taxes. This opens the door for future work on whether other labor "wedges"—such as social security contributions or unemployment benefits—regressively affect profits and wage bills across firms.

This paper empirically links the theory to dismissal regulation by exploiting EPL adoption. In a dynamic model with sufficiently patient firms, a dismissal cost acts as a tax on growth: it raises expected future severance liabilities by making hiring costly to reverse. In steady state, such a setting maps into the static wedge used in my baseline framework. Section A.2 in the Appendix presents this dynamic extension.

3 Improving Employment Protection Legislation

In this section, I analyze the effects of strengthening EPL on profits and the wage bill. The experiment has three stages. Initially, the economy is subject to EPL φ^0, with initial wage w^0. In the second stage, an unexpected labor reform increases φ. In the last stage, the economy operates under the new EPL, φ. Wage rigidities prevent the wage from fully adjusting to EPL changes. In particular, the new wage is $w^i = w + i(w^0 - w)$, where w satisfies (2.15) under the new EPL, and

i measures wage inflexibility.[7] The corresponding expected wage is: $\bar{w}^i \equiv \frac{p[1-s(1-\varphi)]\cdot w^i}{1-s}$

The parameter i captures wage rigidities present in many states in the U.S., such as minimum wages and collective bargaining, which prevent wages from fully adjusting to EPL changes (De Ridder and Pfajfar, 2017). Including wage rigidities in the model implies that EPL improvements generate unemployment (u). Thus, the labor market condition after EPL adoption becomes:

$$G(\underline{a}) + u = \int_{\underline{a}}^{\overline{a}} l \, g(a) \partial a + l^*(1 - G(\overline{a})), \tag{3.1}$$

which, given the new equilibrium wage w^i, determines unemployment u.

3.1 EPL effects on wages, profits, and the wage bill

I first analyze how strengthening EPL affects wages, and then examine the implications for profits and the wage bill across different firms.

Lemma 2 *Consider a marginal increase in the strength of EPL, then the wage rate w^i goes down. If $i \in (0,1)$, then the* expected wage *$\bar{w}^i$ increases. If $i = 0$, $\bar{w}^i$ remains unchanged.*

Lemma 2 shows that the equilibrium wage rate (w^i) decreases when EPL improves (φ raises). Despite this, the *expected wage* $\bar{w}^i$ raises when wages are partially inflexible (i.e., $i \in (0,1)$).

First, higher dismissal costs decrease firms' profits all else equal. In response, banks tighten credit constraints by increasing the minimum collateral ($\underline{a}$) and debt costs $r(a)$, while reducing debt limits $d(a)$.[8] Second, higher labor costs reduce labor demand, while a larger minimum collateral ($\underline{a}$) increases the mass of workers. Increased labor supply and decreased labor demand lead to a lower equilibrium wage.

The net impact of EPL on the *expected wage* $\bar{w}^i$ depends on two opposing effects: (i) a smaller wage w^i but (ii) larger dismissal compensation. Lemma 2 shows that (ii) dominates under minimal

[7] For a similar modeling approach to capture wage rigidities, see Garicano et al. (2016).

[8] The tightening of credit constraints is not straightforward. Higher labor costs reduce profits but also decrease capital demand, which lowers the resources that can be lost in default and partially eases credit constraints. However, the profit effect dominates.

wage inflexibility. If wages are perfectly flexible, the net effect on $\bar{w}^i$ is zero (i.e., EPL is neutral).

Proposition 1 requires the following assumption on the exogenous parameters of the model:[9]

Assumption 1 *$R > \frac{\alpha\phi}{\beta(1-\alpha-\beta)}$ and $i > 1 - \frac{\lambda}{\lambda+\alpha}$, with $\lambda = \frac{\phi+R\beta}{\phi^2(1-\beta)}(R\beta(1-\alpha-\beta)-\alpha\phi)$.*

Proposition 1 *A marginal strengthening of EPL reduces firm profits $\Pi(a,d)$ and the wage bill $w^i \cdot l$. The magnitude of these negative effects is strictly decreasing in firm wealth.*

Proposition 1 shows that EPL reduces profits and the wage bill across all firms. These adverse effects are concentrated among smaller firms, for which EPL significantly tightens credit. In response, some firms exit, while survivors substantially cut employment and investment, resulting in big profits losses. Larger firms are also hurt from greater labor costs, but their easier access to credit allows them to soften the negative effects of EPL. The wage bill decreases in all firms because both wages and firm employment fall, with sharper employment cuts in smaller firms whose access to funds is more sensitive to profit reductions.

3.2 Extension: Competition effects

This section extends the model to endogeneize the interest rate (ρ) and output price (q). The goal is to assess whether the general equilibrium effects of reduced competition following stronger EPL can offset its negative effects for some firms.

Sales in equation (2.9) are given by $q \cdot (1-\beta)p^{\frac{1}{1-\beta}} \left(\frac{\beta}{\bar{w}}\right)^{\frac{\beta}{1-\beta}} (a+d)^{\frac{\alpha}{1-\beta}} \equiv q \cdot f(a+d)$ and, without loss of generality, all agents in the economy demand one unit of the output good. The conditions that determine the equilibrium interest rate (ρ) and output price (q) are given by:

$$\int_{\underline{a}}^{\overline{a}} (a+d)\ g(a)da + k^*(1-G(\underline{a})) = A, \tag{3.2}$$

$$\int_{\underline{a}}^{\overline{a}} f(a+d)\ g(a)da + f(k^*)(1-G(\underline{a})) = 1. \tag{3.3}$$

[9]This assumption ensures that the negative effect of EPL on Π and $w \cdot l$ is strictly decreasing in size. Without it, the size gradient is theoretically ambiguous for medium-sized firms. Nevertheless, it can be shown that the decrease in Π and $w \cdot l$ is more pronounced in a group of small firms relative to a group of larger firms. Assumption 1 is in general not very restrictive, as it is not binding for a set of "reasonable" parameters. For instance, for $\phi = 20\%$, $\alpha = 0.3$, $\beta = 0.6$ it asks that the net cost of capital is larger than zero and that $i > 0$.

Proposition 2 *Consider a marginal strengthening of EPL. Then, there exist wealth cutoffs* $a^E, a^W \in (\underline{a}, \overline{a}]$ *and a wage rigidity threshold* $\bar{i} \in (0, 1)$ *such that:*

1. *Profits* $\Pi(a, d)$ *fall in firms with* $a < a^E$ *and rise in firms with* $a > a^E$*.*

2. *If* $i > \bar{i}$*, the wage bill* $w \cdot l$ *falls in firms with* $a < a^W$ *and rises in firms with* $a > a^W$*.*

Proposition 2 shows that, when accounting for the effects of reduced competition on prices, stricter EPL can raise profits and the wage bill in larger firms. EPL increases the minimum wealth to start a firm and tightens credit for poorest entrepreneurs, reducing the mass of entrepreneurs (output supply) and credit demand. As a result, the interest rate falls ($\downarrow \rho$) while the output price rises ($\uparrow q$). Larger firms, which can more easily absorb EPL, benefit from lower debt costs and higher output prices, expanding employment and investment. Although wages fall, their wage bills increase because employment gains offset wage declines.

The result on the wage bill requires sufficiently rigid wages, otherwise the wage decrease after EPL adoption dominates the employment increase in larger firms.

3.3 Main testable hypotheses

To sum up, the model leads to two testable hypotheses:

Hypothesis 1: *An improvement of EPL decreases profits and the wage bill in smaller firms, with these negative effects diminishing with firm size. Eventually, profits and the wage bill may rise in larger firms.*

Hypothesis 2 (mechanism): *An improvement of EPL crowds out external finance forcing smaller firms to cut employment and investment. Larger firms may increase employment and investment due to reduced debt costs and lower output market competition.*

Overall, the model predicts that the interaction between labor and financial frictions creates unintended regressive effects, as stricter EPL benefits larger firms at a high cost for the most vulnerable firms and workers. Sections 6 and 8 test *Hypothesis 1*, while Section 7 tests *Hypothesis 2*, which is the mechanism behind *Hypothesis 1*.

4 Wrongful Discharge Laws

4.1 Institutional background

Historically, the U.S. "at-will employment" doctrine allowed employers to dismiss employees without cause or legal liability. From 1960s to 1990s, this changed as many states courts recognized one or more of three exceptions to the "at-will employment", known as Wrongful Discharge Laws (WDLs): (i) the *implied contract exception*, (ii) the *public policy exception*, and (iii) the *good faith exception* (see Autor et al., 2004).

By providing a legal recourse against unjust terminations, WDLs aimed to enhance job security and fairness. The *implied contract exception* protects workers when an employer has implicitly promised not to discharge them without good cause. The *public policy exception* allows an employee to take legal action when termination contravenes some established public policy. The *good faith exception* requires terminations not to be out of bad faith, malice, or retaliation.

This paper exploits the *implied contract exception*, which has been found to have significant effects on employment and a broader application (Autor et al., 2006). For robustness, Section 9 exploits the *good faith exception* adoption, used in the labor-finance literature to explore the effects of EPL on firm debt and growth (Serfling, 2016; Bai et al., 2020).

4.2 Adoption of Wrongful Discharge Laws

To identify which court cases set the precedent for adopting a WDL in each state, I largely follow Autor et al. (2006). They search for the first major appellate-court decision indicating the sustained adoption of an exception. Unlike Autor et al. (2006), I follow Walsh and Schwarz (1995) and code Utah as recognizing the *good faith exception* in 1989.

Table 1 reports the adoption dates for each WDL. Most states adopted WDLs between the 1970s and 1990s, some of them later reversed their positions (in parenthesis). Figure 3 shows the number of adopting states between 1959 and 1998. In total, 43 states adopted the *implied contract exception*, 43 the *public policy* doctrine, and 14 the *good faith exception*.

5 Sample Selection and Empirical Methodology

5.1 Sample selection

The sample includes U.S. Compustat firms from 1967 to 1995, covering five years before California's *implied contract exception* (1972) and five years after Ohio's *public policy exception* (1990). I largely follow Serfling (2016) for sample selection, resulting in 86,294 observations (compared to his 88,997).[10] I exclude utilities (SIC 49000-4999), financial firms (SIC 6000-6999), and quasi-public firms (SIC>9900). Additionally, firms require two year of data to estimate firm fixed effects, and 3-digit SIC industries need at least two observations per year for industry-year fixed effects.

5.2 Measuring firm profits, the wage bill, and firm size

Firm profits I use two measures for firm profits: (i) EBITDA and (ii) gross profits after interest. The latter measure corresponds to sales net of operating costs and interest expenses, which is a closer proxy for profits in the model.

Wage bill I use item *XLR* from Compustat, which includes salaries, wages, employee benefits, labor-related taxes, and incentive compensations. A limitation of Compustat is that only 11.6% of the firms disclose their wage bill. Table 2 reports statistics for disclosing and non-disclosing firms. Disclosing firms are about three to four times larger than non-disclosing firms in terms of assets, net worth, sales, and employment. Sample size is a limitation only for the wage bill analysis (Section 8). Firm profits, employment, investment, and debt are universally reported in Compustat, which are the main focus of the paper.

Firm size I use two measures for firm size: (i) gross assets and (ii) net worth. Gross assets serve as a close proxy for a in the model, while net worth represents the resources that are pledgeable to creditors, which in practice influence borrowing conditions (Gan, 2007).

[10] The difference arises because I also use net worth (item *SEQ* from Compustat) as an alternative proxy for size, which has slightly fewer observations than gross assets.

5.3 Empirical methodology

I adopt a triple-differences strategy to examine the effect of the passage of the *implied contract exception* on eight variables across firms of different sizes and financial constraints. The dependent variables are: (i) firm profits, (ii) employment, (iii) investment, (iv) debt, (v) cost of debt, (vi) exit, (vii) entry, and (viii) wage bill. I estimate the following panel regression model:

$$y_{i,s,t} = \alpha_0 + \alpha_1 \text{ Implied contract}_{s,t} + \alpha_2 \text{ Implied contract}_{s,t} \times \text{Z}_{i,s,t-1} + \alpha_3 \text{ Z}_{i,s,t-1} + \text{X}_{i,s,t-1}\beta + \nu_i + \delta_s + \eta_k \times \omega_t + \varepsilon_{i,s,t}, \tag{5.1}$$

where $y_{i,s,t}$ is one of the eight variables (i) to (viii) for firm i in state s in year t. Implied contract$_{s,t}$ is an indicator for whether the state in which the firm is headquartered has adopted the *implied contract exception* as of year t. $\text{Z}_{i,s,t-1}$ corresponds to either firm size or a measure of financial constraints for firm i in state s at the beginning of the year.

When testing *Hypothesis 1* in Section 6, $\text{Z}_{i,s,t-1}$ is either the lagged log of assets (Log Assets$_{t-1}$) or the lagged log of net worth (Log Net Worth$_{t-1}$). When testing *Hypothesis 2* in Section 7, $\text{Z}_{i,s,t-1}$ corresponds to one of four financial constraints proxies used in the labor-finance literature: (i) the SA index (Hadlock and Pierce, 2010), (ii) the KZ index (Kaplan and Zingales, 1997; Lamont et al., 2001), (iii) the WW index (Whited and Wu, 2006), and (iv) a non-dividend payer indicator.

The interaction term, Implied contract$_{s,t} \times Z_{i,s,t-1}$, captures the impact of the *implied contract* across firms with different sizes or financial constraints. Based on equation (5.1), the effect of enhanced EPL (i.e., Implied contract$_{s,t} = 1$) on $y_{i,s,t}$ at different sizes and financial constraints is:

$$(y_{i,s,t}|\text{Implied contract}_{s,t} = 1) - (y_{i,s,t}|\text{Implied contract}_{s,t} = 0) = \alpha_1 + \alpha_2 \times Z_{i,s,t-1}. \tag{5.2}$$

First, suppose that $Z_{i,s,t-1}$ is firm assets or net worth and $y_{i,s,t}$ is profits. *Hypothesis 1* predicts $\alpha_1 < 0$ and $\alpha_2 > 0$. Thus, the effect of the *implied contract exception* adoption on firm profits is negative for smaller firms. This negative effect weakens with firm size, and may become positive for larger firms. Second, suppose that $Z_{i,s,t-1}$ measures financial constraints. *Hypothesis 2* predicts $\alpha_1 > 0$ and $\alpha_2 < 0$. Thus, firm profits, employment, investment, debt, and wage bill decrease for financially constrained firms, while this effect is weaker and potentially positive for less constrained firms. For the cost of debt and exit, the sign of the coefficients are expected to reverse (i.e., $\alpha_1 < 0$ and $\alpha_2 > 0$), i.e., constrained firms face higher debt costs and exit rates after adoption.

5.3.1 Control variables

The regression model includes a set of control variables $X_{i,s,t-1}$ from the labor-finance literature (e.g., Bai et al., 2020; Serfling, 2016): log of the beginning-of-year book assets (Log Assets$_{t-1}$), lagged profitability (Profitability$_{t-1}$), lagged fixed assets ratio (Fixed assets$_{t-1}$), lagged market-to-book ratio (Market to book$_{t-1}$), dividend payer indicator (Dividend payer$_t$), lagged modified Altman's z-score (Modified z-score$_{t-1}$), and lagged book leverage (Book leverage$_{t-1}$). Table A1 provides variable definitions, while Table 3 reports summary statistics.

To attenuate omitted variable bias, all regressions include firm (ν_i), state (δ_s), and industry-year ($\eta_k \times \omega_t$) fixed effects. Standard errors are clustered at the state level. Since WDLs are adopted at the state level, this methodology accounts for residuals being serially correlated within a firm and across firms in the same state (Bertrand et al., 2004).

5.3.2 Addressing econometric concerns: summary

In what follows, I provide a summary of the most important econometric concerns. In Section 9, I present different robustness exercises that address these concerns.

Pre-treatment trends A causal interpretation requires that, without the *implied contract exception* adoption, the change in profits and wage bill across firms with different sizes would have been the same for both treated and control firms. Following Bertrand and Mullainathan (2003), Section 9.1 explores the timing of changes in firm profits and the wage bill relative to the *implied contract* adoption. The results show that profits and the wage bill decline more in smaller firms only after EPL adoption, supporting the parallel trend assumption.

States' local economic conditions To account for local economic conditions, I control for lagged state-level log of GDP per capita (Log State per capita GDP$_{t-1}$) and lagged state GDP growth (State GDP growth$_{t-1}$). Alternatively, I include state-year fixed effects to account for time-varying omitted variables affecting all firms in the same state each year. In particular, as discussed in Section 2, state-level differences in wage rigidities over time influence the responsiveness of wages to EPL, and thus, the impact of EPL on firm profits and the wage bill.

Adoption in neighboring states Walsh and Schwarz (1995) find that neighboring state precedents influenced the adoption of the *implied contract* and *public policy* exceptions, and to a lesser extent the *good faith exception*. Along the same lines, Bird and Smythe (2008) show that federal circuit precedents were more influential than neighboring states. To address this, I control for the fraction of states in the same federal circuit that had passed WLDs in the previous year (Circuit implied contract$_{t-1}$, Circuit good faith$_{t-1}$, and Circuit public policy$_{t-1}$).

Political conditions Although WDLs adoption might have been influenced by state politics or lobbying, their common law roots suggest recognition was driven by merits rather than political considerations (Autor, 2003). In Section 9.2, I address residual concerns by controlling for three state-level political variables that may have shaped WDLs adoption (Serfling, 2016): (i) the fraction of state's Democrats in the U.S. Congress (Political balance$_t$), (ii) right-to-work laws (Right-to-work$_t$), and (iii) collective bargaining coverage (Union membership$_t$). The latter two also potentially capture differences in state-level wage rigidities.

Headquarters locations WDLs apply to the state where a firm is located. However, Compustat provides only the latest headquarters location. To account for relocations, in Section 9.3, I supplement Compustat with historical headquarters data.

Differences in treated and control groups Table 4 compares the sample means of firms in states adopting the *implied contract exception* with those in non-adopting states, revealing significant differences between treated and control firms. The gradual and staggered adoption of WDLs partially alleviates this concern because firms can be in both groups over time. In Section 9.4, I address this issue more directly by employing a propensity score matching procedure.

6 Employment Protection and Firm Profits

In this section, I test *Hypothesis 1* by examining the impact of the *implied contract exception* on profits. The Hypothesis predicts that EPL reduces profits in smaller firms, with this negative effect diminishing as firm size increases. Eventually, EPL may raise profits in larger firms.

6.1 Average change of firm profits

Figure 4a shows the effect of the *implied contract exception* adoption on profits in treated versus control firms. Coefficients changes reflect percentage changes relative to the mean (in decimal form). Following Autor et al. (2006) and Acharya et al. (2014), I regress firm profits on adoption-year indicators with year fixed effects. The plot shows the coefficients for ±5 years around adoption, with 90% confidence intervals (dashed lines) using standard errors clustered by state.

Profits of treated and control firms are statistically different only in the years after the *implied contract exception* adoption, suggesting similar pre-treatment trends. Profits are on average around 10% lower for treated firms. In Section 9.1, I test for the parallel trend assumption that, without treatment, the change in profits across firms of different sizes would have been the same for treated and control firms.

6.2 Testing Hypothesis 1: Change in firm profits

Table 5 shows the results from estimating equation (5.1) by using EBITDA or gross profits after interest as the dependent variables. Both measures are normalized by their sample means.

Columns (1)-(6) use EBITDA, while (7) to (10) use gross profits after interest. Firm-level controls are those from Serfling (2016). Columns (4), (6), (8), (10) are the primary specifications, which include state-level controls. Alternatively, columns (3), (5), (7) and (9) use state-year fixed effects to account for unobserved time-varying state-level factors. Standard errors are clustered by state.

The coefficient for the interaction term, Implied contract$_t \times$ Size$_{t-1}$, is positive and significant at least at the 90% level across all specifications, whether size is measured by assets or net worth. The coefficient for Implied contract$_t$ is negative and statistically significant in all specifications. Significance of the interaction term increases when using profits after interest, which is a closer measure to the model. Thus, the data supports *Hypothesis 1*: EPL reduces profits of smaller firms, and this negative effect decreases with size.

Using expression (5.2) and the coefficients of column (4), the marginal effect of Implied contract$_t$ on EBITDA for a firm with average assets (Log Assets$_{t-1}$ = 4.74) is: $-0.588 + 0.110 \times 4.74 = -6.7\%$. Similarly, based on column (6), the effect is -5.5% for a firm with average net worth (Log Net Worth$_{t-1}$ = 4.01). Thus, for a firm with average size, the *implied contract exception* decreases EBITDA by $5.5 - 6.7\%$ (9 million). When using profits net of interest (columns (8) and (10)) these effects amount to a reduction of $12 - 13.6\%$ for a firm with average size.

Figure 5 shows the marginal effect of Implied contract$_t$ on EBITDA conditional on firm assets and net worth. Table 10 shows the effects of the *implied contract exception* adoption on EBITDA, employment, debt, and exit by percentiles of assets, net worth, and SA index. For firms in the 25th and 50th percentiles of assets, the *implied contract* reduces EBITDA by 24% ($36 million) and 7.9% ($12 million), respectively. For a firm in the 75th percentile, the *implied contract* increases EBITDA by 8.5% ($13 million). The effects are of similar magnitude for net worth.

The data supports the model's prediction of a size threshold above which profits increase with improved EPL. Figure 5 indicates that this threshold is approximately Log assets$_{t-1}$ = 5.3 or Log net worth$_{t-1}$ = 4.5 , i.e., $200 million in assets or $90 million in net worth.

7 Testing Mechanisms

In this section, I test *Hypothesis 2*: EPL limits access to credit for smaller firms, forcing them to cut employment and investment. Larger firms benefit from credit contraction of smaller firms through one or both of the following channels: (i) expanded credit and lower debt costs, driven by reduced credit demand from smaller firms; and (ii) reduced market competition due to increased exit rates among smaller firms.

To test *Hypothesis 2*, I estimate the impact of the *implied contract* on profits, conditioned on four financial constraints proxies (Section 7.1). Then, I examine its impact on employment, investment, debt, debt costs, exit, and entry across financial constraints (Sections 7.2 to 7.4).

The evidence suggests that the *implied contract exception* reduces profits in smaller, more financially constrained firms—those above the 35th percentile of financial constraints—by limiting access to credit, forcing them to cut employment. In contrast, larger, less financially constrained firms gain profits by raising more credit to expand employment. Potentially, they also benefit from reduced market competition due to significantly higher exit rates among constrained firms without any effect on entry. There is some evidence for reduced debt costs and investment expansion in larger firms, although it is weaker than for the employment-exit channel.

7.1 Financial constraints and profits

Table 6 presents the results using profits as the dependent variable, with $Z_{i,s,t-1}$ in equation (5.1) representing one of four financial constraints proxies: SA index, KZ index, WW index, and a non-dividend payer indicator. A higher value of any measure indicates stricter financial constraints. The signs of the interest coefficients are expected to reverse compared to Section 6, i.e., $\alpha_1 > 0$ and $\alpha_2 < 0$.[11] Thus, the *implied contract exception* should reduce profits in firms that were more financially constrained before the law's adoption.

As predicted, the interaction term, Implied contract$_t$×Financial constraints$_{t-1}$, is negative and

[11]The SA index is negative for the least financially constrained firms. Therefore, α_1 is expected to be negative when using this measure. This is confirmed by columns (1) and (2) in Table 6.

significant when using the SA index or the non-dividend payer indicator as financial constraints proxies. Table 10 shows that the *implied contract exception* raises profits by 7% in a firm at the 25th percentile of SA index, while it reduces profits by 2% and 11% in firms at the 50th and 75th percentiles, respectively. This evidence suggests that EPL reduces profits in firms that were more financially constrained before its adoption, while it increases profits in less constrained firms. Columns (3) to (6) show no effect for the KZ or WW indices. This is consistent with Hadlock and Pierce (2010), who question the KZ index's validity and find that the WW index's usefulness is mixed and likely sample-specific.

7.2 Financial constraints, employment, and investment

In this section, I test *Hypothesis 2* more directly. I investigate whether the decline in profits in smaller firms after the *implied contract exception* adoption stems from EPL limiting credit access, forcing them to reduce employment and investment. If true, employment and investment cuts should be more pronounced in smaller, more financially constrained firms. I also explore whether profits increases in larger firms result from expanded employment and investment.

I estimate specification (5.1) using: (i) item *EMP* for employment and (ii) *CAPX* (capital expenditures) for investment. The interaction term, Implied contract$_{s,t} \times Z_{i,s,t-1}$, should be positive for size and negative for financial constraints. Table 7 reports the results.

Employment The interaction term has the predicted sign and is highly significant when measuring size by assets or net worth and when measuring financial constraints by the SA index or the non-dividend payer indicator. It is also significant in some specifications that use the KZ and WW index. These findings support that stronger EPL reduces employment in smaller, more financially constrained firms by crowding out access to capital.

Figure 6a shows the marginal effect of Implied contract$_t$ on employment conditional on the SA index (see also Table 10). For firms in the 25th of financial constraints, the *implied contract exception* raises employment by 7%. For firms in the 50th and 75th percentiles, it decreases employment by 4% and 15%, respectively. For an average firm, it reduces employment by 2.6%, in line with Autor et al. (2004, 2007), who find that WDLs decrease employment by about $1.5 - 4.5\%$.

Table 10 shows that changes in employment mirror changes in EBITDA across percentiles. The evidence suggests that EPL raises profits in larger, less financially constrained firms by expanding employment, whereas the decline in profits in smaller, more constrained firms reflects a corresponding reduction in employment.

Investment The interaction term has the predicted sign but is not significant across specifications, except when financial constraints are captured by the non-dividend payer indicator. The coefficient on Implied contract$_{s,t}$ has the expected sign and is significant in some specifications for net worth, SA index, KZ index, WW index, and the non-dividend payer indicator. Despite the lack of significance in the general regression, Figure 6b shows that the *implied contract exception* increases investment by 18% at the 25th percentile of the SA index, with this effect statistically significant.

The findings of this section provide strong support for the prediction that EPL reduces employment in more financially constrained firms but increases it in less constrained firms, with corresponding effects on profits. However, the effect of the *implied contract exception* on investment is weaker and does not appear to be a major channel driving changes in profits.

7.3 Financial constraints, debt, and the cost of debt

In this section, I test whether employment contraction in smaller firms after the *implied contract* adoption is explained by reduced debt and higher debt costs, whereas employment expansion in larger firms is driven by firms accessing to cheaper and greater amounts of debt.

I estimate specification (5.1) using: (i) item *DLC* (debt in current liabilities) plus *DLTT* (long-term debt) for total debt and (ii) item *XINT* (total interest expenses) over debt for debt costs. $Z_{i,s,t-1}$ is either size (assets or net worth) or one of the preferred measures for financial constraints: the SA index and non-dividend payer indicator. For debt, the interaction term, Implied contract$_{s,t}$ $\times$

$Z_{i,s,t-1}$, is expected to be positive for size and negative for financial constraints, these effects should reverse for the cost of debt.

Table 8 reports the regressions. For debt, the interest coefficients are highly significant and have the predicted sign in all specifications.[12] However, for the cost of debt, the interest coefficients are significant only when measuring financial constraints by the SA index.

Figures 6c and 6d show the marginal effect of the *implied contract* adoption on debt and the cost of debt, conditional on the SA index. For a firm in the 25th percentile of financial constraints, the *implied contract* increases debt by 14%. For firms in the 50th and 75th percentiles, it reduces debt by 5% and 24%, respectively. Moreover, Table 10 shows that expansions and contractions of credit align with corresponding changes in employment. This suggests that EPL may shrink operations in financially constrained by limiting access to credit, while unconstrained firms may expand employment by issuing more debt. The evidence for a debt-cost channel is weaker.

7.4 Financial constraints, firm exit, and entry

In this section, I test the last part of *Hypothesis 2*: EPL may substantially increase exit rates among smaller, more financially constrained firms, thereby reducing competition faced by larger firms. I also examine the effects on firm entry to rule out the possibility that EPL raises entry, which would potentially offset the effects of higher exit rates.

A firm is classified as exiting ($\text{Exit}_{i,s,t} = 1$) if two conditions hold: it is present in year t but absent in year $t+1$, and its delisting reason is either acquisition, merger, bankruptcy, or liquidation (item *DLRSN* in Compustat). This classification is standard in the literature (Cefis et al., 2022). A firm is coded as entering ($\text{Entry}_{i,s,t} = 1$) in its first year in Compustat or upon reentry after exit. The computed average exit and entry rates in Compustat firms are 6% and 8.7%, respectively.

Table 9 presents estimates from specification (5.1) for firm exit and entry. For exit, the interaction term, $\text{Implied contract}_{s,t} \times Z_{i,s,t-1}$, is highly significant and has the expected sign—negative for size and positive for financial constraints—across both measures for size or whether financial

[12]Unreported regressions show that the results are robust to using debt net of cash holdings. This accounts for firms raising liquid assets when labor costs increase.

constraints are proxied by the SA index or non-dividend payer status. In contrast, the adoption of the *implied contract exception* does not affect entry.

Figure 6e shows the marginal effect of *implied contract* on firm exit and entry, conditional on the SA index. The adoption of the exception raises the exit rate by 0.3%, 1.3%, and 2.2% for firms in the 25th, 50th, and 75th percentiles of financial constraints, respectively. Table 10 shows effects of similar magnitudes across assets and net worth percentiles. While less constrained firms also experience a modest increase in exit, they may benefit from reduced competition as more financially constrained firms exit at significantly higher rates.

8 Employment Protection and the Wage Bill

8.1 Average change of the wage bill

Figure 4b plots the effect of the *implied contract* on the wage bill in treated versus control firms within a ±5-year window, with 90% confidence intervals. Pre-adoption trends are not statistically different. After two to three years of adoption, the wage bill falls by 10% in treated firms.

8.2 Testing Hypothesis 1: Change in the wage bill

Table 11 presents estimates from equation (5.1) for the wage bill and employment (restricted to wage bill disclosers). It shows the effects of the *implied contract* and *good faith* exceptions across firms sizes and financial constraints (SA index or non-dividend payer status). Odd columns use controls from Serfling (2016), even columns use controls from Michaels et al. (2019).

The *implied contract exception* has no significant immediate effect on the wage bill. Nevertheless, Table A2 shows that the interaction term $\text{Implied contract}^{t} \times \text{Size}_{t-1}$ becomes highly significant after two years in some specifications. This aligns with Figure 4b, which shows a 10% decline in the average wage bill two to three years after adoption.

The *good faith exception* has a statistically significant effect on the wage bill upon adoption. The interaction term $\text{Good faith}_{t} \times \text{Size}_{t-1}$ has the expected sign for size (positive) and non-dividend payer status (negative). The interaction with the SA index is negative but insignificant, likely due to insufficient observations to identify firms' differential effects. For employment, the interaction term has the predicted sign across specifications but loses significance for the non-dividend payer indicator.

Figure 7 plots the marginal effect of *good faith* on the wage bill and employment by firm size (disclosing firms). The exception reduces the wage bill by 6% in a firm at the 25th percentile of assets but it raises it by 12% and 31% at the 50th and 75th percentiles. Similarly, the exception reduces employment by 2.6% at the 25th percentile, while it increases employment by 17% and 37% at the 50th and 75th percentiles. These effects are similar when size is measured by net worth.

A back-of-the-envelope calculation suggests that the *good faith exception* reduces wages by about 5% in a median-sized firm. The evidence is consistent with the model's prediction that EPL raises the wage bill in larger firms because employment gains offset wage declines. There is no evidence for a contemporaneous effect of the *implied contract* on the wage bill or employment (in unreported regressions).

Overall, the interaction term has the predicted signs, but sometimes lacks significance. This likely reflects three factors. First, wage bill data is disclosed mainly by larger firms, limiting statistical power. Second, for the *implied contract exception*, larger unconstrained firms may not face an immediate rise in lawsuits, with costs arising only in subsequent years. Third, the *good faith exception* has a narrower and more heterogeneous application across states and over time (Autor et al., 2006, 2007). Thus, the results of this section should be viewed as suggestive rather than conclusive. Future work should examine the wage-bill effects in a broader sample.

9 Econometric Concerns and Robustness Checks

9.1 Pre-treatment trends

Figure 4 shows similar pre-treatment trends for treated and control firms. A key concern is reverse causality: if "at-will employment" allows firms—especially smaller, constrained ones—to offset profit declines via dismissal, courts may respond by adopting WDLs. Smaller firms would then show larger declines in profits and the wage bill before the *implied contract exception* adoption.

To test for pre-existing trends, I adapt the approach of Bertrand and Mullainathan (2003) by examining profits and wage bill changes around the *implied contract exception* across firms sizes.[13] I replace Implied contract$_t$ with: Implied contract^{-1}, Implied contract^{0}, Implied contract^{+1} and Implied contract^{+2}. These variables indicate if a state: (i) will enact the law in one year, (ii) passes it in the current year, (iii) adopted it one year ago, and (iv) enacted it two or more years ago. Their interaction with Log Assets$_{t-1}$ or Log Net Worth$_{t-1}$ captures size-specific pre-trends.

Table A2 shows that profits and the wage bill decline in smaller firms only after the *implied contract exception* adoption. For the wage bill, the interaction term becomes highly significant after two years in some specifications. These results validate the triple-differences strategy. Unreported regressions show that profits and the wage bill decrease in more financially constrained firms (as measured by the SA index and non-dividend payers) only after the law's adoption.

9.2 Political conditions

WDLs arise from common-law principles, making their adoption unlikely to be driven by political factors or lobbying (Autor, 2003). To account for regional influences, all specifications control for WDL adoption within the same federal circuits (Bird and Smythe, 2008). To address omitted variable concerns, I add three state-level political variables from Serfling (2016): (i) Political balance$_t$, fraction of Democrat representatives; (ii) Right-to-work$_t$, dummy for right-to-work (RTW) law passage; and (iii) Union membership$_t$, share of employees with collective bargaining coverage.

Table A3 shows that the main findings are robust to political controls. Union membership increases exit rates. Consistent with RTW laws weakening unions and reducing wages, I find that they are positively related to profits and investment. They also raise debt costs and reduce debt. These findings are consistent with Chava et al. (2020).

[13]To my knowledge, there is no standard method for testing parallel trends in triple-differences estimators with a continuous interaction variable. Although this estimator is widely used in empirical applications, its theoretical properties and testing the parallel trends remain active research topics in the econometrics literature (Olden and Møen, 2022; Strezhnev, 2023, 2024; Zhuang, 2024).

9.3 Historical headquarters

WDLs typically apply to the state where a firm is headquartered, but Compustat reports only the latest locations. To account for relocation, I supplement Compustat with historical headquarters from Bai et al. (2020). Table A4 shows that the main findings are generally robust to accounting for relocation. The interaction term of Implied contract$_t$ with net worth and the SA index preserves the expected sign and remains significant for profits, employment, debt, and exit.

9.4 Matched sample

Table 4 shows that treated and control groups differ across several firm and state-level dimensions. To address this, I employ propensity score matching based on log assets, profitability, fixed assets, market to book ratio, a dividend payers indicator, modified z-score, and book leverage. Each treated firm is matched to a control with replacement on year and three digit SIC industry. Table A5 presents the results, showing that the findings are robust to using a matched sample.

9.5 The good faith exception

Table A6 presents the main specifications when exploiting the *good faith exception* adoption, using net worth for size and the SA index for financial constraints. The interaction term is significant and has the expected sign for profits and debt across specifications. Thus, smaller firms lose profits through a crowding-out effect of EPL on credit. The evidence for employment and investment effects is more mixed: while the interaction term has the expected sign, it is significant only for the SA index. Thus, profits losses in more financially constrained firms may stem from employment and investment cuts. The *good faith exception* shows no effect on exit or entry.

Although the signs of the effects align with the model's predictions, significance for the *good faith* estimates is weaker. This may reflect the exception's more limited adoption, narrower application (Autor et al., 2006), and varying interpretation across states and over time (Autor et al., 2007), which complicate inference.

10 Conclusions

This paper investigates whether Employment Protection Legislation (EPL) disproportionally harms the small-scale sector. Although EPL distorts firms' decisions by reducing access to credit (Simintzi et al., 2015; Serfling, 2016; Bai et al., 2020), the role of financial constraints in shaping the effectiveness of EPL remains largely unexplored. This paper addresses this gap by showing that the EPL-finance interaction creates unintended regressive consequences: EPL reduces profits and the wage bill in smaller firms while benefiting only larger firms and their workers.

To guide the empirical analysis, I first build a model where agents are heterogeneous in assets, choose to be either workers or entrepreneurs, and face endogenous credit constraints. The model provides two testable predictions. First, EPL reduces profits and the wage bill in smaller firms but benefits larger firms and their workers. Second, these effects operate through a credit channel: EPL limits credit for smaller firms, forcing them to cut employment, investment, and even exit the market. Larger firms benefit from reduced competition in both the credit and output markets.

To test the model's predictions, I exploit the staggered adoption of the *implied contract exception* by U.S. states. I find empirical evidence that EPL creates regressive effects through its interaction with financial constraints. Profits losses in smaller firms stem from EPL crowding out credit, forcing them to cut employment. Larger firms expand employment by issuing more debt. Potentially, they benefit from lower competition due to smaller firms exiting at significantly higher rates. The evidence for the wage bill effects is consistent with the model, but more mixed.

This article points to several promising avenues for future research. First, the firm-dependent distortions from the EPL-finance interaction may induce misallocation effects, which could be further explored using employer-employee data. Second, the findings support the widespread implementation of size-contingent EPL, where smaller firms face softer regulations. The firm-dependent distortions coming from financial constraints provide a basis for future research on the emergence of other size-contingent policies, such as special tax treatments and credit subsidies. Finally, this paper underscores the importance of incorporating endogenous financial constraints that respond to policy changes in future work on optimal policy design.

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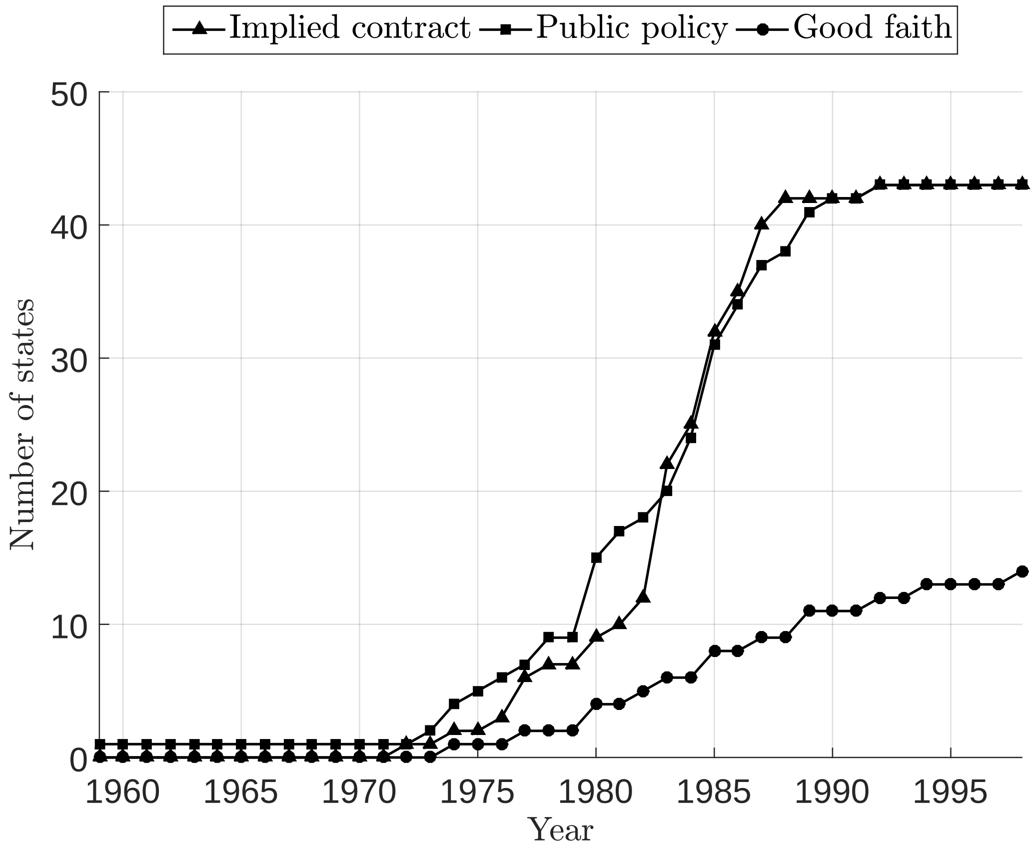


Figure 3: Number of states adopting Wrongful Discharge Laws (WDLs)

This figure shows the number of states that adopted the *implied contract*, *public policy*, and *good faith exception* between 1959 and 1998.

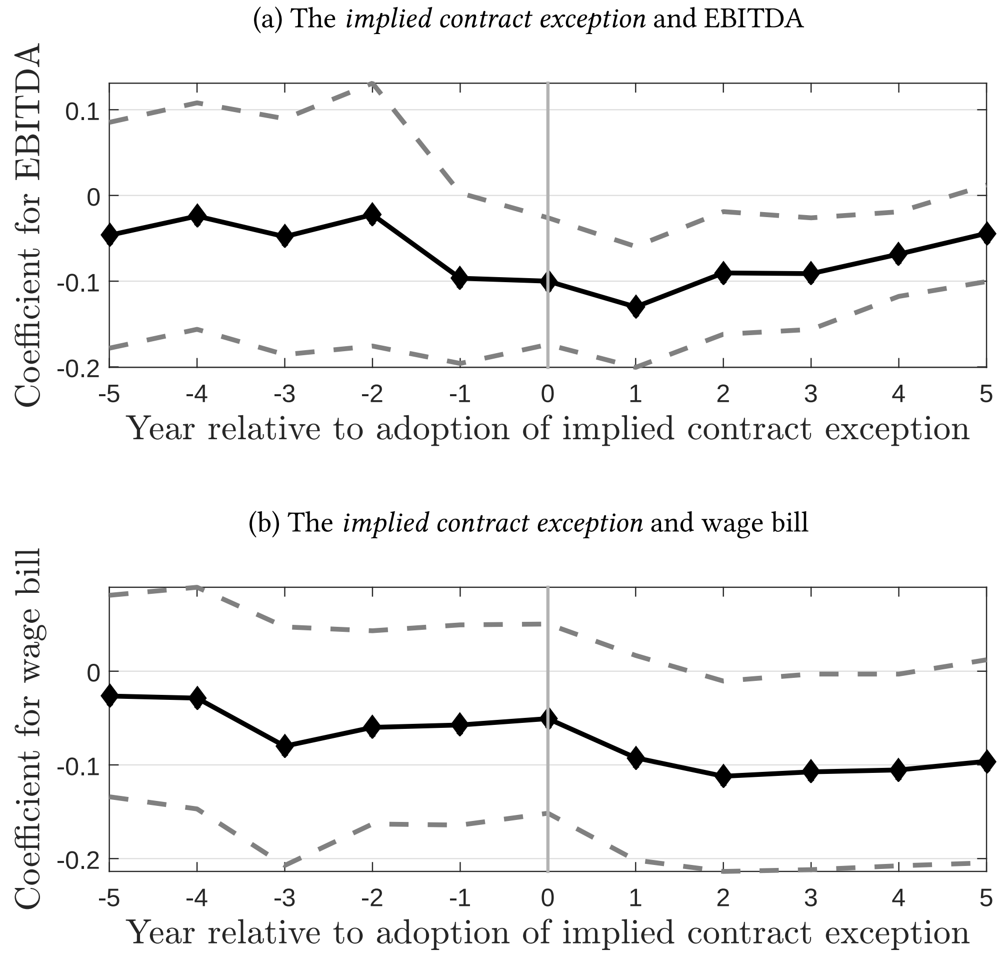


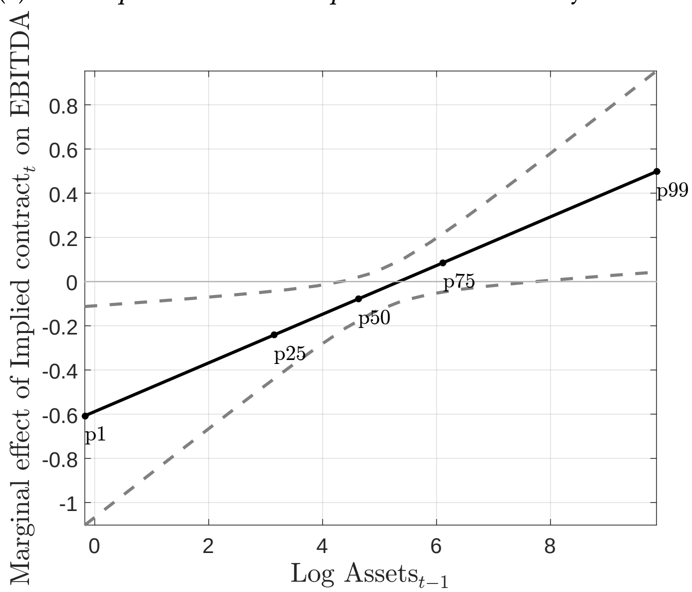
Figure 4: Effect of the passage of the *implied contract exception* on firm profits and wage bill

This figure shows the effect of the *implied contract exception* adoption on EBITDA and wage bill from Compustat. Both variables are scaled by their sample mean. The y-axis presents the coefficients from regressing EBITDA or the wage bill on dummy variables indicating the year relative to the *implied contract exception* and year fixed effects. The x-axis shows the years relative to the *implied contract* adoption. The dashed lines are the 90% confidence intervals for the estimated coefficients. Standard errors are clustered by state. The graph shows the point estimates and 90% confidence intervals of the parameters β^{τ} from the following regression:

$$y_{i,s,t} = \omega_t + \sum_{\tau=-8}^{8} \beta^{\tau} \times \text{Implied contract}^{\tau}_{s,t} + \varepsilon_{i,s,t},$$

where $y_{i,s,t}$ are EBITDA or the wage bill in year t in firm i in state s. Implied contract$^{\tau}_{s,t}$ is a dummy variable indicating the year relative to the enactment of the *implied contract exception* in state s and year t.

(a) The *implied contract exception* and EBITDA by firm assets



(b) The *implied contract exception* and EBITDA by firm net worth

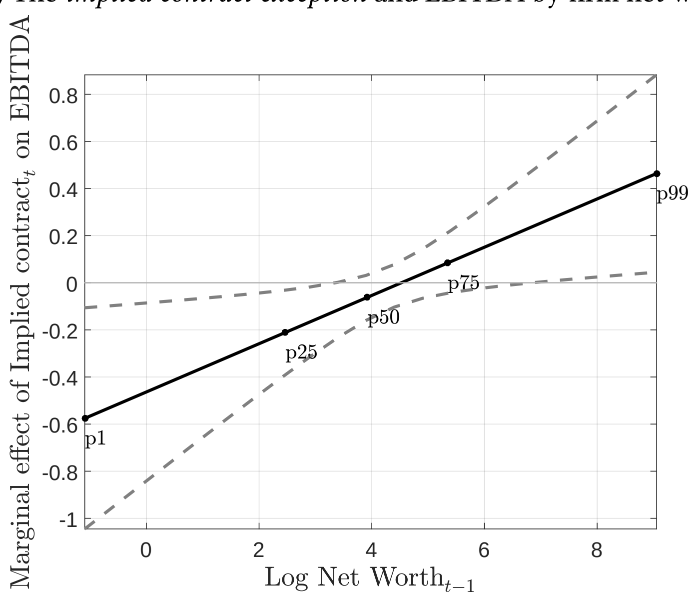


Figure 5: Effect of the passage of the *implied contract exception* on EBITDA as a function of size

The figure shows the marginal effect of the *implied contract exception* adoption (Implied contract faith$_t$ = 1) on EBITDA conditional on lagged log assets (Log Assets$_{t-1}$) or lagged net worth (Log Net Worth$_{t-1}$). Calculations are based on the estimated coefficients presented in columns (4) and (6) of Table 5. The black solid line presents the marginal effect of Implied contract$_t$ = 1 on EBITDA according to expression (5.2). The dashed lines correspond to the 90% confidence intervals obtained from applying the delta method. Standard errors are clustered by state. The black dots indicate the effect of Implied contract$_t$ on EBITDA for the 1st, 25th, 50th, 75th and 99th percentiles of log assets or log net worth. The effects are in terms of percentage change (in decimal form) relative to the mean.

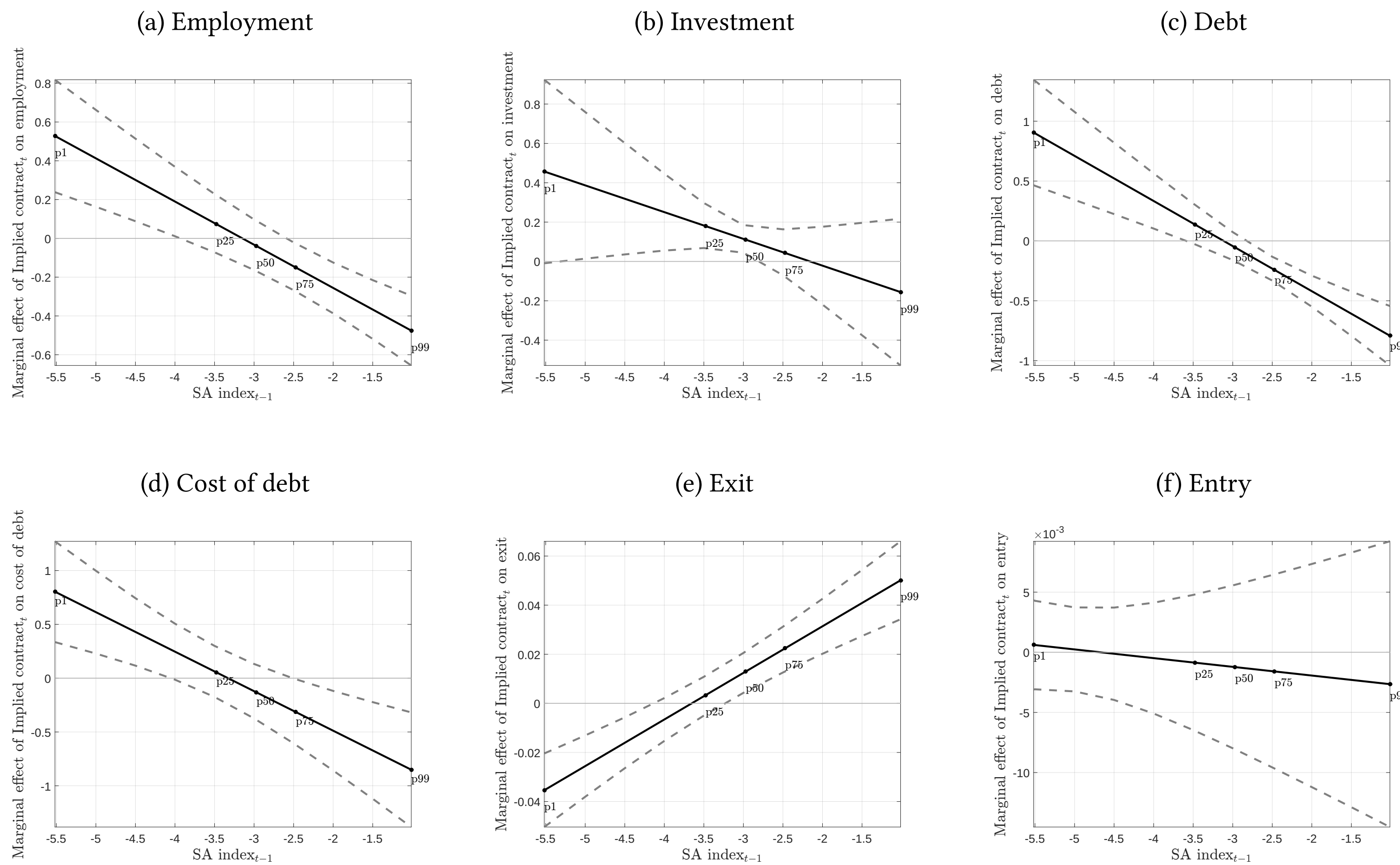


Figure 6: Effect of the *implied contract* adoption on employment, investment, debt, cost of debt, exit, and entry.

The figure shows the marginal effect of the *implied contract* adoption (Implied contract$_t$ = 1) on employment, investment, debt, cost of debt, exit, and entry by lagged SA index (SA index$_{t-1}$). Calculations are based on the estimated coefficients presented in column (6) of Tables 7 to 9. The black solid line presents the marginal effect of Implied contract$_t$ = 1 on each variable according to expression (5.2). The dashed lines correspond to the 90% confidence intervals obtained from applying the delta method. Standard errors are clustered by state. The black dots indicate the effect of Implied contract$_t$ on each variable for the 1st, 25th, 50th, 75th and 99th percentiles of SA index. For employment, investment, debt, and the cost of debt the effects are expressed as percentage changes (in decimal form) relative to the mean. For exit and entry, they are expressed as absolute terms (in decimal form).

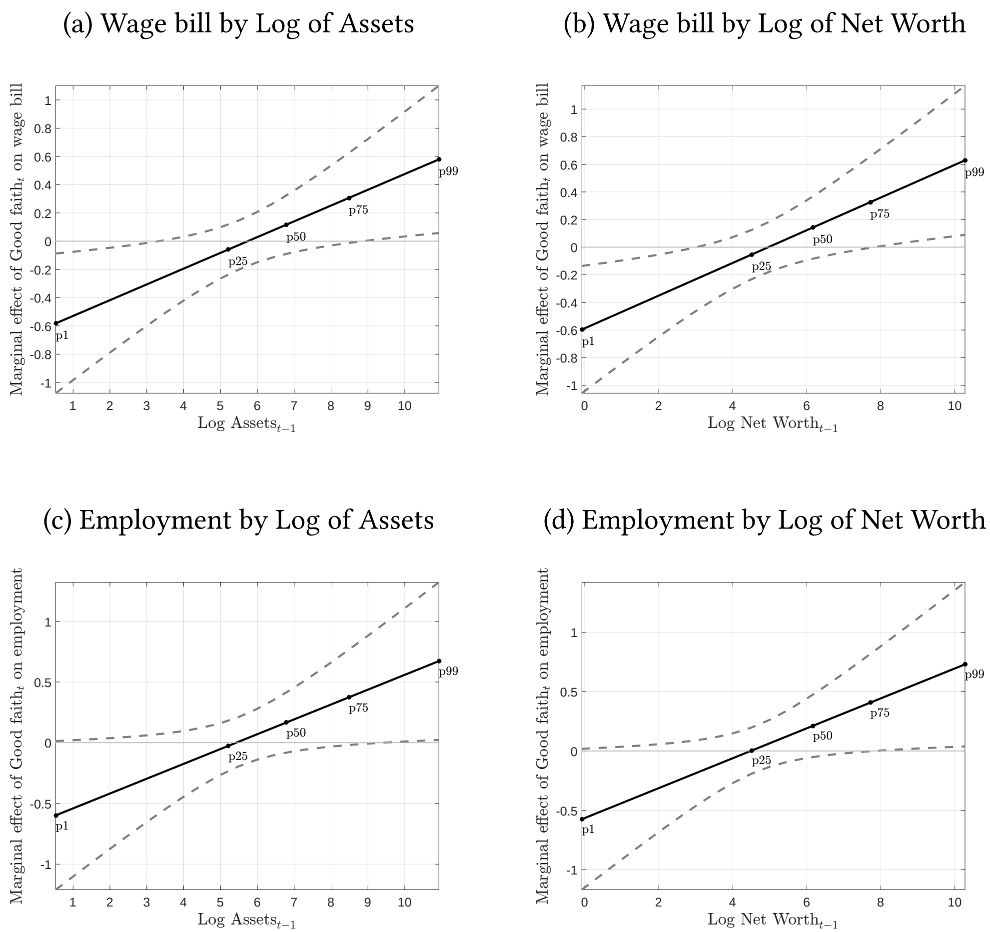


Figure 7: Effect of the *good faith exception* adoption on the wage bill and employment as a function of size

The figure shows the marginal effect of the *good faith exception* adoption (Good faith$_t$ = 1) on the wage bill and employment conditional on lagged log assets (Log Assets$_{t-1}$) or lagged net worth (Log Net Worth$_{t-1}$). Calculations are based on the estimated coefficients presented in columns (1) and (3) of Table 11. The black solid line presents the marginal effect of Good faith$_t$ = 1 on the wage bill and employment according to expression (5.2). The dashed lines correspond to the 90% confidence intervals obtained from applying the delta method. Standard errors are clustered by state. The black dots indicate the effect of Good faith$_t$ on the wage bill and employment for the 1st, 25th, 50th, 75th and 99th percentiles of log assets or log net worth for firms with non-missing wage bill data. The effects on wage bill and employment are in terms of the percentage change (in decimal form) relative to the mean.

Table 1: Adoption of state-level Wrongful Discharge Laws (WDLs)

State	**Implied contract** *Month/year*	**Public Policy** *Month/year*	**Good faith** *Month/year*
Alabama	7/1987		
Alaska	5/1983	2/1986	5/1983
Arizona	6/1983 (Rev. 4/1984)	6/1985	6/1985
Arkansas	6/1984	3/1980	
California	3/1972	9/1959	10/1980
Colorado	10/1983	9/1985	
Connecticut	10/1985	1/1980	6/1980
Delaware		3/1992	4/1992
Florida			
Georgia			
Hawaii	8/1986	10/1982	
Idaho	4/1977	4/1977	8/1989
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	5/1988	5/1980	7/1977
Michigan	6/1980	6/1976	
Minnesota	4/1983	11/1986	
Mississippi	6/1992	7/1987	
Missouri	1/1983 (Rev. 2/1988)	11/1985	
Montana	6/1987	1/1980	1/1982
Nebraska	11/1983	11/1987	
Nevada	8/1983	1/1984	2/1987
New Hampshire	8/1988	2/1974	2/1974 (Rev. 5/1980)
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	12/1976	2/1989	5/1985 (Rev. 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	4/1985	6/1984	
Utah	5/1986	3/1989	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	8/1985	7/1989	1/1994

The table reports the month and year that each state adopted the *implied contract, public policy*, and *good faith* exceptions. The month and year that some states reversed any of the three exceptions appear in parenthesis.

Table 2: Sample statistics: disclosing and non-disclosing firms

	Full	**Disclosing firms**	**Non-disclosing firms**
Number of observations	86,294	8079	78215
Number of firms	8,446	975	7,471
Means			
Assets (billion $)	0.97	3.10	0.76
Net worth (billion $)	0.432	1.42	0.33
Sales (billion $)	1.28	3.69	1.03
Employment (thousands)	6.30	18.05	5.06

The table reports statistics for firms with available and non-available wage bill data in Compustat (item *XLR*), referred to as "disclosing" and "non-disclosing firms", respectively. Dollar values are expressed in 2009 dollars. Table A1 in the Appendix provides variable definitions.

Table 3: Summary statistics for restricted sample and full sample

	Restricted sample					Full sample				
	Mean	**Std. Dev**	**P25**	**Median**	**P75**	**Mean**	**Std. Dev**	**P25**	**Median**	**P75**
Dependent variables										
EBITDA_t	0.83	2.20	0.03	0.14	0.72	0.15	0.45	0.00	0.02	0.09
$\text{Gross profits after interest}_t$	1.38	3.21	0.04	0.26	1.36	0.34	0.98	0.01	0.06	0.22
Employment_t	20.17	33.35	1.64	6.26	25.30	6.30	18.42	0.27	1.14	4.29
$\text{Capital expenditures}_t$	0.49	1.25	0.01	0.07	0.39	0.09	0.27	0.00	0.01	0.04
Debt_t	1.17	2.64	0.02	0.16	1.07	0.28	0.92	0.00	0.03	0.15
Cost of debt_t	0.11	0.28	0.07	0.09	0.11	0.20	6.19	0.07	0.09	0.12
Exit_t	0.04	0.20	0.00	0.00	0.00	0.06	0.24	0.00	0.00	0.00
Entry_t	0.05	0.21	0.00	0.00	0.00	0.09	0.28	0.00	0.00	0.00
Wage bill_t	1.23	1.95	0.08	0.35	1.50	-	-	-	-	-
Main explanatory variables										
$\text{Implied contract}_t$	0.35	0.48	0.00	0.00	1.00	0.49	0.50	0.00	0.00	1.00
Good faith_t	0.08	0.27	0.00	0.00	0.00	0.16	0.37	0.00	0.00	0.00
Control variables										
Public policy_t	0.33	0.47	0.00	0.00	1.00	0.44	0.50	0.00	0.00	1.00
Assets_{t-1}	4.77	11.32	0.17	0.82	4.61	0.97	2.70	0.04	0.15	0.57
Net worth_{t-1}	2.22	5.42	0.07	0.42	2.14	0.43	1.14	0.02	0.07	0.26
$\text{Profitability}_{t-1}$	0.02	0.18	0.02	0.03	0.05	0.02	0.10	0.01	0.03	0.05
$\text{Fixed assets}_{t-1}$	0.45	0.22	0.28	0.43	0.63	0.33	0.21	0.17	0.29	0.45
$\text{Market to book}_{t-1}$	4.65	6.96	1.73	2.63	4.80	4.32	7.21	1.57	2.41	4.44
Dividend payer_t	0.75	0.43	1.00	1.00	1.00	0.49	0.50	0.00	0.00	1.00
$\text{Modified z-score}_{t-1}$	2.13	2.73	1.63	2.40	3.09	2.11	2.31	1.47	2.40	3.16
$\text{Book leverage}_{t-1}$	0.24	0.19	0.11	0.22	0.32	0.24	0.18	0.09	0.23	0.36
Sales_t	5.40	13.09	0.27	1.10	5.50	1.28	3.37	0.05	0.22	0.84
$\text{Capital expenditures}_{t-1}$	0.48	1.22	0.01	0.06	0.38	0.08	0.27	0.00	0.01	0.04
Employment_{t-1}	19.88	32.70	1.57	6.00	25.00	6.15	17.98	0.25	1.10	4.10
$\text{State per capita GDP}_{t-1}$	36.78	5.02	33.39	36.45	40.17	38.12	5.30	34.57	38.00	41.67
$\text{State GDP growth}_{t-1}$	0.02	0.04	0.00	0.03	0.05	0.02	0.04	-0.01	0.02	0.05
$\text{Circuit good faith}_{t-1}$	0.07	0.16	0.00	0.00	0.00	0.12	0.20	0.00	0.00	0.25
$\text{Circuit implied contract}_{t-1}$	0.28	0.33	0.00	0.11	0.60	0.38	0.35	0.00	0.33	0.75
$\text{Circuit public policy}_{t-1}$	0.32	0.33	0.00	0.33	0.67	0.41	0.34	0.00	0.33	0.67
$\text{Union Membership}_t$	21.84	9.60	12.90	22.50	30.10	20.94	8.93	13.10	21.10	27.90
Right-to-work_t	0.32	0.47	0.00	0.00	1.00	0.28	0.45	0.00	0.00	1.00
$\text{Political balance}_t$	0.62	0.16	0.51	0.59	0.70	0.61	0.15	0.52	0.59	0.68

This table reports summary statistics for the restricted and full sample. The restricted sample consists of Compustat firms that disclose their wage bill. The full sample corresponds to Compustat firms (excluding financials and utilities) over the period 1967 to 1995. EBITDA is earnings before interest, taxes and depreciation. Gross profits after interest are sales minus operating costs and interest expenses. EBITDA, Gross profits after interest, Assets, Net worth, Sales, Capital expenditures, Debt, Wage bill, and State per capita GDP are in billion dollars. Employment is in thousands of workers. Dollar values are expressed in 2009 dollars. Table A1 in the Appendix provides variable definitions.

Table 4: Sample means, treatment and control firms

	Restricted sample				Full sample			
	Treatment		Control		Treatment		Control	
	Mean	**Std. Dev**	**Mean**	**Std. Dev**	**Mean**	**Std. Dev**	**Mean**	**Std. Dev**
Dependent variables								
EBITDA_t	0.95^{***}	2.40	0.76	2.09	0.19^{***}	0.98	0.23	1.06
Gross profits after interest_t	1.50^{***}	3.53	1.31	3.03	0.42^{***}	2.00	0.47	1.78
Employment_t	19.9	33.46	20.32	33.29	6.31^{***}	23.84	7.71	20.33
Capital expenditures_t	0.57^{***}	1.45	0.44	1.12	0.11^{***}	0.55	0.13	0.61
Debt_t	1.39^{***}	3.27	1.05	2.21	0.35^{***}	1.60	0.38	1.42
Cost of debt_t	0.12^{***}	0.24	0.10	0.29	0.24	7.47	0.20	7.87
Exit_t	0.06^{***}	0.24	0.02	0.16	0.08^{***}	0.27	0.04	0.19
Entry_t	0.04^{***}	0.20	0.06	0.23	0.08	0.29	0.08	0.28
Wage bill_t	1.2	2.01	1.24	1.91	-	-	-	-
Control variables								
Good faith_t	0.16^{***}	0.37	0.03	0.18	0.26^{***}	0.44	0.06	0.24
Public policy_t	0.57^{***}	0.50	0.21	0.41	0.64^{***}	0.48	0.25	0.43
Assets_{t-1}	5.61^{***}	13.69	4.30	9.71	1.24^{***}	5.71	1.36	5.12
Net worth_{t-1}	2.34	5.90	2.15	5.13	0.5^{***}	2.41	0.64	2.52
$\text{Profitability}_{t-1}$	0.01^{**}	0.28	0.02	0.07	0^{***}	0.31	0.02	0.10
Fixed assets_{t-1}	0.46^{***}	0.25	0.45	0.21	0.31^{***}	0.22	0.35	0.20
Market to book_{t-1}	3.68^{***}	7.33	5.17	6.69	3.64^{***}	9.63	5.17	9.95
Dividend payer_t	0.59^{***}	0.49	0.84	0.37	0.36^{***}	0.48	0.60	0.49
Modified z-score_{t-1}	1.49^{***}	3.65	2.47	1.99	1.36^{***}	11.45	2.40	2.87
Book leverage_{t-1}	0.25^{***}	0.24	0.23	0.16	0.26	0.51	0.26	0.20
Sale_t	5.93^{***}	14.90	5.12	11.99	1.47^{***}	6.27	1.72	5.89
Capital $\text{expenditures}_{t-1}$	0.57^{***}	1.47	0.42	1.05	0.11^{***}	0.56	0.13	0.58
Employment_{t-1}	19.63	32.76	20.01	32.67	6.17^{***}	23.25	7.59	20.35
State per capita GDP_{t-1}	39.2^{***}	5.06	35.47	4.49	40.63^{***}	4.95	35.76	4.50
State GDP growth_{t-1}	0.02^{***}	0.04	0.03	0.04	0.02^{***}	0.04	0.02	0.04
Circuit good faith_{t-1}	0.15^{***}	0.22	0.02	0.10	0.19^{***}	0.23	0.04	0.12
Circuit implied contract_{t-1}	0.63^{***}	0.25	0.10	0.19	0.66^{***}	0.25	0.12	0.21
Circuit public policy_{t-1}	0.63^{***}	0.26	0.16	0.23	0.64^{***}	0.24	0.19	0.26
Union Membership_t	19.62^{***}	7.69	23.05	10.29	19.89^{***}	7.25	21.88	10.20
Right-to-work_t	0.26^{***}	0.44	0.35	0.48	0.19^{***}	0.39	0.37	0.48
Political balance_t	0.58^{***}	0.11	0.63	0.18	0.58^{***}	0.11	0.64	0.17

This table compares the mean values and standard deviations for treatment (firms headquartered in states that adopt the *implied constract exception*) and control firms (firms headquartered in states that do not adopt the *implied constract exception*). It considers both the restricted and full sample. The restricted sample consists of Compustat firms that disclose their wage bill. The full sample corresponds to Compustat firms (excluding financials and utilities) over the period 1967 to 1995. In the columns labeled 'Treatment', *, **, and *** correspond to significance at the 10%, 5%, and 1% levels, respectively, for a t-test of whether the means of the treatment and control groups are equal. EBITDA is earnings before interest, taxes and depreciation. Gross profits after interest are sales minus operating costs and interest expenses. EBITDA, Gross profits after interest, Assets, Net worth, Sales, Capital expenditures, Debt, Wage bill, and State per capita GDP are in billion dollars. Employment is in thousands of workers. Dollar values are expressed in 2009 dollars. Table A1 in the Appendix provides variable definitions.

Table 5: The implied contract exception and firm profits

	EBITDA						Gross profits after interest			
	Log Assets				Log Net Worth		Log Assets		Log Net Worth	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Implied contract$_t$	-0.563*	-0.577**	-0.559**	-0.588**	-0.442**	-0.464**	-0.792**	-0.866***	-0.630**	-0.708***
	(0.288)	(0.286)	(0.277)	(0.291)	(0.212)	(0.230)	(0.306)	(0.292)	(0.236)	(0.230)
Size$_{t-1}$	0.376***	0.403***	0.399***	0.402***	0.249***	0.251***	0.412***	0.424***	0.250***	0.259***
	(0.0526)	(0.0518)	(0.0536)	(0.0525)	(0.0483)	(0.0465)	(0.0417)	(0.0415)	(0.0393)	(0.0375)
Implied contract$_t$ × Size$_{t-1}$	0.108*	0.110*	0.112*	0.110*	0.105*	0.102*	0.163**	0.154***	0.154***	0.147***
	(0.0564)	(0.0559)	(0.0599)	(0.0565)	(0.0546)	(0.0521)	(0.0624)	(0.0570)	(0.0565)	(0.0523)
Good faith$_t$	-0.0315	-0.0342	0.00834	0.0419	0.0133	0.0516	0.129	0.0521	0.132	0.0635
	(0.0744)	(0.0743)	(0.0611)	(0.0642)	(0.0631)	(0.0662)	(0.101)	(0.0806)	(0.104)	(0.0819)
Public policy$_t$	0.0485	0.0481	-0.00306	0.0178	0.00434	0.0175	-0.0336	0.0161	-0.0242	0.0158
	(0.0480)	(0.0479)	(0.0468)	(0.0337)	(0.0460)	(0.0326)	(0.0615)	(0.0459)	(0.0603)	(0.0452)
Profitability$_{t-1}$		0.467***	0.495***	0.462***	0.400***	0.369***	0.324***	0.287***	0.205**	0.171**
		(0.0912)	(0.0979)	(0.0924)	(0.0901)	(0.0850)	(0.0772)	(0.0777)	(0.0787)	(0.0797)
Fixed assets$_{t-1}$		0.475***	0.477***	0.479***	0.459***	0.461***	0.298***	0.319***	0.273***	0.293***
		(0.0985)	(0.0998)	(0.0985)	(0.0923)	(0.0932)	(0.0775)	(0.0779)	(0.0708)	(0.0735)
Market to book$_{t-1}$		0.00235*	0.00261**	0.00232*	0.00181	0.00151	-0.00270	-0.00297	-0.00355	-0.00386
		(0.00120)	(0.00125)	(0.00120)	(0.00127)	(0.00126)	(0.00203)	(0.00203)	(0.00231)	(0.00231)
Dividend payer$_t$		0.0776***	0.0895***	0.0780***	0.113***	0.102***	0.0723**	0.0583**	0.0964***	0.0833***
		(0.0214)	(0.0234)	(0.0214)	(0.0233)	(0.0213)	(0.0287)	(0.0268)	(0.0286)	(0.0268)
Modified z-score$_{t-1}$		-0.0484***	-0.0496***	-0.0482***	-0.0408***	-0.0394***	-0.0542***	-0.0527***	-0.0447***	-0.0431***
		(0.00558)	(0.00553)	(0.00570)	(0.00501)	(0.00520)	(0.00563)	(0.00545)	(0.00535)	(0.00519)
Book leverage$_{t-1}$		-0.564***	-0.557***	-0.565***	0.295***	0.288***	-0.661***	-0.657***	0.271***	0.285***
		(0.0736)	(0.0740)	(0.0751)	(0.0572)	(0.0575)	(0.0864)	(0.0835)	(0.0627)	(0.0622)
State per capita GDP$_{t-1}$				0.149		0.218		-0.0388		0.0430
				(0.279)		(0.282)		(0.302)		(0.299)
State GDP growth$_{t-1}$				0.0851		0.0485		0.161		0.120
				(0.336)		(0.343)		(0.321)		(0.324)
Circuit implied contract$_{t-1}$				0.0103		0.00257		0.0589		0.0484
				(0.0913)		(0.0874)		(0.0948)		(0.0911)
Observations	86,294	86,294	86,233	86,294	86,233	86,294	83,788	83,856	83,788	83,856
Adjusted R-squared	0.843	0.844	0.845	0.844	0.843	0.842	0.864	0.863	0.863	0.861
Firm fixed effects	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
State fixed effects	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
Industry x Year fixed effects	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
State x Year fixed effects	NO	NO	YES	NO	YES	NO	YES	NO	YES	NO

This table presents the results from OLS regressions relating EBITDA and gross profits after interest to the *implied contract exception* adoption for Compustat non-financial firms from 1967 to 1995. Both variables are normalized by their sample mean. Implied contract$_t$ is an indicator variable set to one if the state at which a firm is headquartered has enacted the *implied contract exception* by year t and zero otherwise. Size$_{t-1}$ is measured either by Log Assets$_{t-1}$ (columns (1)-(4) and (7)-(8)) or Log Net Worth$_{t-1}$ (columns (5)-(6) and (9)-(10)). Regressions using Log Assets$_{t-1}$ are restricted to firms with available net worth data to facilitate comparability across specifications. Table A1 in the Appendix provides variable definitions. All regressions include firm fixed effects, state-level fixed effects, and industry-year fixed effects. Columns (3),(5), (7) and (9) also include state-year fixed effects. Standard errors are clustered at the state-level (standard deviations in parenthesis). *, **, and *** correspond to significance at the 10%, 5%, and 1% levels, respectively.

Table 6: Financial constraints and profits

	Hadlock and Pierce (2010)		Kaplan and Zingales (1997)		Whited and Wu (2006)		Non-dividend payer	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	EBITDA							
Implied contract$_t$	-0.987***	-0.559*	0.000796	-0.00887	-0.00597	-0.00705	0.213**	0.139
	(0.333)	(0.313)	(0.0456)	(0.0639)	(0.0475)	(0.0642)	(0.0865)	(0.0956)
Financial constraint$_{t-1}$	0.193	0.190	1.70e-05	0.000128*	0.00355	-0.00521	0.121**	0.102*
	(0.149)	(0.125)	(8.05e-05)	(7.00e-05)	(0.00932)	(0.00617)	(0.0563)	(0.0547)
Implied contract$_t$ × Financial constraint$_{t-1}$	-0.323**	-0.181*	-6.23e-07	-0.000117	-0.0120	0.00145	-0.410***	-0.297***
	(0.121)	(0.107)	(8.09e-05)	(7.07e-05)	(0.0110)	(0.00719)	(0.109)	(0.104)
Observations	75,550	75,179	80,280	79,899	77,808	77,420	86,233	86,294
Adjusted R-squared	0.827	0.844	0.838	0.853	0.838	0.854	0.821	0.839
	Gross profits after interest							
Implied contract$_t$	-1.178**	-0.938**	-0.0101	-0.0428	-0.0190	-0.0451	0.282***	0.149
	(0.467)	(0.390)	(0.0584)	(0.0767)	(0.0545)	(0.0783)	(0.0779)	(0.107)
Financial constraint$_{t-1}$	0.0192	0.0585	6.64e-06	9.96e-05	0.00424	-0.00105	0.123*	0.107*
	(0.177)	(0.153)	(7.88e-05)	(7.41e-05)	(0.0104)	(0.00661)	(0.0669)	(0.0620)
Implied contract$_t$ × Financial constraint$_{t-1}$	-0.384**	-0.281**	1.10e-05	-8.63e-05	-0.0123	-0.00330	-0.526***	-0.421***
	(0.149)	(0.135)	(7.88e-05)	(7.46e-05)	(0.0117)	(0.00734)	(0.134)	(0.108)
Observations	73,542	73,163	78,144	77,749	75,796	75,396	83,788	83,856
Adjusted R-squared	0.852	0.869	0.866	0.880	0.866	0.880	0.839	0.856
State control variables	NO	YES	NO	YES	NO	YES	NO	YES
Firm fixed effects	YES	YES	YES	YES	YES	YES	YES	YES
State fixed effects	YES	YES	YES	YES	YES	YES	YES	YES
Industry x Year fixed effects	YES	YES	YES	YES	YES	YES	YES	YES
State x Year fixed effects	YES	NO	YES	NO	YES	NO	YES	NO

This table presents the results from OLS regressions relating EBITDA and gross profits after interest to the *implied contract exception* adoption for Compustat non-financial firms from 1967 to 1995. Both measures are normalized by their sample mean. Implied contract$_t$ is an indicator variable set to one if the state at which a firm is headquartered has enacted the *implied contract exception* by year t and zero otherwise. The upper table uses EBITDA as dependent variable, while the bottom table uses gross profits after interest. The firm-level controls are the ones used in Serfling (2016). Table A1 in the Appendix provides variable definitions. Financial constraint$_{t-1}$ is a firm-level measure of the degree of financial constraints at year $t-1$. In columns (1) to (6), Financial constraint$_{t-1}$ is measured by the indexes in Hadlock and Pierce (2010), Kaplan and Zingales (1997), and Whited and Wu (2006). In columns (7) and (8), Financial constraint$_{t-1}$ is an indicator variable set to one if a firm is not paying common dividends in year $t-1$ and zero otherwise. Odd columns include state-year fixed effects. Even columns include state-level controls. All regressions are restricted to firms with available net worth data to facilitate comparability with Table 5. Standard errors are clustered at the state-level (standard deviations in parenthesis). *, **, and *** correspond to significance at the 10%, 5%, and 1% levels, respectively.

Table 7: Financial constraints, employment, and investment

	Log Assets		Net worth		Hadlock and Pierce (2010)		Kaplan and Zingales (1997)		Whited and Wu (2006)		Non-dividend payer	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
	Employment											
Implied contract$_t$	-0.641**	-0.642***	-0.581***	-0.593***	-0.632***	-0.701***	-0.154*	0.0178	-0.170**	0.0175	0.0441	0.159*
	(0.254)	(0.218)	(0.214)	(0.197)	(0.225)	(0.153)	(0.0784)	(0.0801)	(0.0788)	(0.0839)	(0.0675)	(0.0931)
Financial constraint$_{t-1}$	0.620***	0.500***	0.506***	0.392***	-0.330**	-0.143	0.000231*	0.000274	-0.00486	-0.00111	-0.0489	0.00940
	(0.0724)	(0.0533)	(0.0614)	(0.0435)	(0.155)	(0.127)	(0.000126)	(0.000164)	(0.00619)	(0.00694)	(0.0381)	(0.0450)
Implied contract$_t$ × Financial constraint$_{t-1}$	0.117***	0.121***	0.122***	0.131***	-0.153**	-0.223***	-0.000235	-0.000366*	-0.0102	-0.0116*	-0.294***	-0.336***
	(0.0436)	(0.0363)	(0.0410)	(0.0362)	(0.0625)	(0.0531)	(0.000152)	(0.000211)	(0.0103)	(0.00625)	(0.0699)	(0.0844)
Observations	85,883	85,354	83,314	82,765	73,314	72,918	77,913	77,509	75,623	75,209	82,702	82,765
Adjusted R-squared	0.844	0.862	0.844	0.862	0.848	0.866	0.856	0.874	0.856	0.875	0.836	0.857
	Capital expenditures											
Implied contract$_t$	-0.584	-0.239	-0.501*	-0.210	-0.576*	-0.293	-0.108	0.0877*	-0.109	0.0913**	-0.00985	0.193***
	(0.366)	(0.380)	(0.293)	(0.305)	(0.306)	(0.338)	(0.0700)	(0.0450)	(0.0739)	(0.0448)	(0.0870)	(0.0687)
Financial constraint$_{t-1}$	0.652***	0.527***	0.473***	0.381***	-0.104	0.0537	0.000154	0.000254*	-0.0115	-0.00948	-0.0528	0.00707
	(0.0664)	(0.0397)	(0.0549)	(0.0383)	(0.142)	(0.118)	(9.22e-05)	(0.000145)	(0.00836)	(0.00634)	(0.0477)	(0.0466)
Implied contract$_t$ × Financial constraint$_{t-1}$	0.104	0.0660	0.103	0.0715	-0.156	-0.136	-0.000132	-0.000236	0.00492	0.00678	-0.163*	-0.178*
	(0.0752)	(0.0716)	(0.0710)	(0.0670)	(0.110)	(0.112)	(9.16e-05)	(0.000145)	(0.0103)	(0.00755)	(0.0909)	(0.105)
Observations	85,244	85,307	85,828	85,307	75,570	75,199	79,458	79,077	77,020	76,632	85,244	85,307
Adjusted R-squared	0.797	0.814	0.797	0.813	0.796	0.812	0.805	0.821	0.804	0.822	0.790	0.810
State control variables	NO	YES	NO	YES	NO	YES	NO	YES	NO	YES	NO	YES
Firm fixed effects	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
State fixed effects	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
Industry x Year fixed effects	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
State x Year fixed effects	YES	NO	YES	NO	YES	NO	YES	NO	YES	NO	YES	NO

This table presents the results from OLS regressions relating employment and capital expenditures (investment) to the *implied contract exception* adoption for Compustat non-financial firms from 1967 to 1995. Employment and capital expenditures are normalized by their sample mean. Implied contract$_t$ is an indicator variable set to one if the state at which a firm is headquartered has enacted the *implied contract exception* by year t and zero otherwise. The upper table uses employment as dependent variable, the bottom table uses capital expenditures. The firm-level controls are the ones used in Serfling (2016). Table A1 in the Appendix provides variable definitions. Financial constraint$_{t-1}$ is a firm-level measure of the degree of financial constraints at year $t-1$. In columns (1) to (4), Financial constraint$_{t-1}$ is replaced by firm size (Log of assets or Log of net worth). In columns (5) to (10), Financial constraint$_{t-1}$ is measured by the indexes in Hadlock and Pierce (2010), Kaplan and Zingales (1997), and Whited and Wu (2006). In columns (11) and (12), Financial constraint$_{t-1}$ is an indicator variable set to one if a firm is not paying common dividends in year $t-1$ and zero otherwise. Odd columns include state-year fixed effects. Even columns include state-level controls. All regressions are restricted to firms with available net worth data to facilitate comparability with previous tables. Standard errors are clustered at the state-level (standard deviations in parenthesis). *, **, and *** correspond to significance at the 10%, 5%, and 1% levels, respectively.

Table 8: Financial constraints, debt, and the cost of debt

	Log Assets		**Net worth**		**Hadlock and Pierce (2010)**		**Non-dividend payer**	
	(1)	**(2)**	**(3)**	**(4)**	**(5)**	**(6)**	**(7)**	**(8)**
				Debt				
Implied contract$_t$	-1.623***	-1.301***	-1.294***	-1.020***	-1.417***	-1.174***	0.248***	0.282**
	(0.386)	(0.319)	(0.288)	(0.239)	(0.290)	(0.236)	(0.0803)	(0.116)
Financial constraint$_{t-1}$	0.618***	0.533***	0.416***	0.356***	0.283*	0.290**	-0.0787	-0.0447
	(0.101)	(0.0822)	(0.0865)	(0.0752)	(0.145)	(0.135)	(0.0569)	(0.0679)
Implied contract$_t$ × Financial constraint$_{t-1}$	0.338***	0.258***	0.318***	0.242***	-0.468***	-0.377***	-0.496***	-0.422***
	(0.0765)	(0.0663)	(0.0669)	(0.0592)	(0.0933)	(0.0887)	(0.102)	(0.0971)
Observations	86,390	86,451	86,965	86,451	75,537	75,166	86,390	86,451
Adjusted R-squared	0.756	0.778	0.752	0.776	0.769	0.788	0.743	0.770
				Cost of debt				
Implied contract$_t$	-0.402	-0.375	-0.0392	0.0147	-0.784	-1.222***	-0.381	-0.0936
	(0.387)	(0.324)	(0.502)	(0.488)	(0.486)	(0.435)	(0.406)	(0.168)
Financial constraint$_{t-1}$	0.000776	0.0140	-0.121*	-0.0878	-0.523*	-0.535	0.0194	0.117
	(0.0894)	(0.103)	(0.0683)	(0.104)	(0.277)	(0.414)	(0.343)	(0.371)
Implied contract$_t$ × Financial constraint$_{t-1}$	0.0320	0.0586	-0.0685	-0.0204	-0.0833	-0.367***	0.136	0.0388
	(0.0433)	(0.0481)	(0.0726)	(0.0842)	(0.132)	(0.119)	(0.255)	(0.227)
Observations	69,999	70,071	69,999	70,071	60,623	60,499	69,999	70,071
Adjusted R-squared	0.309	0.359	0.309	0.359	0.308	0.401	0.309	0.359
State control variables	NO	YES	NO	YES	NO	YES	NO	YES
Firm fixed effects	YES	YES	YES	YES	YES	YES	YES	YES
State fixed effects	YES	YES	YES	YES	YES	YES	YES	YES
Industry x Year fixed effects	YES	YES	YES	YES	YES	YES	YES	YES
State x Year fixed effects	YES	NO	YES	NO	YES	NO	YES	NO

This table presents the results from OLS regressions relating debt and the cost of debt to the *implied contract exception* adoption for Compustat non-financial firms from 1967 to 1995. Debt and the cost of debt are normalized by their sample mean. Implied contract$_t$ is an indicator variable set to one if the state at which a firm is headquartered has enacted the *implied contract exception* by year t and zero otherwise. The upper table uses debt as dependent variable, the bottom table uses the cost of debt. The firm-level controls are the ones used in Serfling (2016). Table A1 in the Appendix provides variable definitions. Financial constraint$_{t-1}$ is a firm-level measure of the degree of financial constraints at year $t-1$. In columns (1) to (4), Financial constraint$_{t-1}$ is replaced by firm size (Log of assets or Log of net worth). In columns (5) and (6), Financial constraint$_{t-1}$ is measured by the index in Hadlock and Pierce (2010). In columns (7) and (8), Financial constraint$_{t-1}$ is an indicator variable set to one if a firm is not paying common dividends in year $t-1$ and zero otherwise. Odd columns include state-year fixed effects. Even columns include state-level controls. All regressions are restricted to firms with available net worth data to facilitate comparability with previous tables. Standard errors are clustered at the state-level (standard deviations in parenthesis). *, **, and *** correspond to significance at the 10%, 5%, and 1% levels, respectively.

Table 9: Financial constraints, exit, and entry

	Log Assets		**Net worth**		**Hadlock and Pierce (2010)**		**Non-dividend payer**	
	(1)	**(2)**	**(3)**	**(4)**	**(5)**	**(6)**	**(7)**	**(8)**
				Exit				
Implied contract$_t$	0.0620***	0.0712***	0.0525***	0.0614***	0.0655***	0.0694***	-0.000147	0.00271
	(0.00942)	(0.00926)	(0.00852)	(0.00772)	(0.0127)	(0.0129)	(0.00810)	(0.00535)
Financial constraint$_{t-1}$	0.00787***	0.00610**	0.00548***	0.00435**	-0.0277***	-0.0245***	-0.00952*	-0.0101**
	(0.00234)	(0.00252)	(0.00176)	(0.00175)	(0.00548)	(0.00563)	(0.00522)	(0.00493)
Implied contract$_t$ × Financial constraint$_{t-1}$	-0.0110***	-0.0111***	-0.0108***	-0.0109***	0.0206***	0.0190***	0.0161**	0.0183***
	(0.00159)	(0.00126)	(0.00133)	(0.00105)	(0.00416)	(0.00358)	(0.00673)	(0.00579)
Observations	86,629	86,690	87,203	86,690	75,570	75,199	86,629	86,690
Adjusted R-squared	0.321	0.301	0.321	0.301	0.327	0.310	0.320	0.300
				Entry				
Implied contract$_t$	-0.00227	-0.00535	-0.00244	-0.00433	-0.000313	-0.00338	-0.00195	-0.000748
	(0.00338)	(0.00811)	(0.00304)	(0.00714)	(0.00409)	(0.00888)	(0.00202)	(0.00369)
Financial constraint$_{t-1}$	-0.000596	-0.000631	-0.000307	-0.000291	2.98e-05	-0.000367	-0.000772	-0.000180
	(0.000552)	(0.000658)	(0.000497)	(0.000585)	(0.00119)	(0.00168)	(0.000769)	(0.000934)
Implied contract$_t$ × Financial constraint$_{t-1}$	0.000125	0.000736	0.000191	0.000643	0.000467	-0.000724	0.000553	-0.00135
	(0.000416)	(0.000843)	(0.000430)	(0.000755)	(0.00116)	(0.00170)	(0.00129)	(0.00168)
Observations	86,629	86,690	87,203	86,690	75,570	75,199	86,629	86,690
Adjusted R-squared	0.402	0.0887	0.402	0.0886	0.418	0.0980	0.402	0.0886
State control variables	NO	YES	NO	YES	NO	YES	NO	YES
Firm fixed effects	YES	YES	YES	YES	YES	YES	YES	YES
State fixed effects	YES	YES	YES	YES	YES	YES	YES	YES
Industry x Year fixed effects	YES	YES	YES	YES	YES	YES	YES	YES
State x Year fixed effects	YES	NO	YES	NO	YES	NO	YES	NO

This table presents the results from OLS regressions relating firm exit and entry to the *implied contract exception* adoption for Compustat non-financial firms from 1967 to 1995. Implied contract$_t$ is an indicator variable set to one if the state at which a firm is headquartered has enacted the *implied contract exception* by year t and zero otherwise. The upper table uses exit as dependent variable, the bottom table uses entry. The firm-level controls are the ones used in Serfling (2016). Table A1 in the Appendix provides variable definitions. Financial constraint$_{t-1}$ is a firm-level measure of the degree of financial constraints at year $t-1$. In columns (1) to (4), Financial constraint$_{t-1}$ is replaced by firm size (Log of assets or Log of net worth). In columns (5) and (6), Financial constraint$_{t-1}$ is measured by the index in Hadlock and Pierce (2010). In columns (7) and (8), Financial constraint$_{t-1}$ is an indicator variable set to one if a firm is not paying common dividends in year $t-1$ and zero otherwise. Odd columns include state-year fixed effects. Even columns include state-level controls. All regressions are restricted to firms with available net worth data to facilitate comparability with previous tables. Standard errors are clustered at the state-level (standard deviations in parenthesis). *, **, and *** correspond to significance at the 10%, 5%, and 1% levels, respectively.

Table 10: Marginal effect of the implied contract on EBITDA, employment, debt, and exit across percentiles of size and SA index.

	EBITDA			Employment		
	25th	**50th**	**75th**	**25th**	**50th**	**75th**
Log Assets$_{t-1}$	-24.2%	-7.9%	8.5%	-26.0%	-8.1%	10.0%
Log Net Worth$_{t-1}$	-21.0%	-6.2%	8.4%	-27.0%	-8.0%	10.8%
SA index$_{t-1}$	6.9%	-2.2%	-11.2%	7.4%	-3.9%	-15.0%
	Debt			**Exit**		
	25th	**50th**	**75th**	**25th**	**50th**	**75th**
Log Assets$_{t-1}$	-42.9%	-8.7%	25.7%	3.6%	1.9%	0.3%
Log Net Worth$_{t-1}$	-42.2%	-7.0%	27.5%	3.5%	1.9%	0.3%
SA index$_{t-1}$	13.7%	-5.4%	-24.2%	0.3%	1.3%	2.2%

This table presents the estimated marginal effects of the *implied contract exception* adoption on EBITDA, employment, debt, and exit for firms at the 25th, 50th, and 75th percentiles of assets, net worth, and the SA index. These effects can be obtained from Figures 5 and 6.

Table 11: WDLs, the wage bill, and employment

	Wage Bill							
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Log Assets		Log Net Worth		Hadlock and Pierce (2010)		Non-dividend payer	
Implied contract$_t$	0.0538	0.116	0.00894	0.0568	0.239	0.189	0.0414	0.0591
	(0.205)	(0.235)	(0.173)	(0.189)	(0.263)	(0.234)	(0.0761)	(0.0834)
Financial constraint$_{t-1}$	0.367***	0.0647	0.264***	0.0812	0.378**	0.869***	-0.0590	0.000804
	(0.0768)	(0.0835)	(0.0603)	(0.0583)	(0.141)	(0.263)	(0.0920)	(0.0928)
Implied contract$_t$ × Financial constraint$_{t-1}$	-0.00115	-0.00563	0.00332	0.00133	0.0710	0.0414	-0.0666	0.0679
	(0.0320)	(0.0349)	(0.0298)	(0.0307)	(0.0698)	(0.0629)	(0.168)	(0.202)
Observations	8,613	8,089	8,437	7,958	7,030	6,808	8,613	8,089
Adjusted R-squared	0.930	0.930	0.930	0.931	0.929	0.938	0.926	0.930
Good faith$_t$	-0.641*	-0.716*	-0.588**	-0.578*	-0.455	-0.396	0.308*	0.304*
	(0.328)	(0.410)	(0.276)	(0.322)	(0.392)	(0.365)	(0.176)	(0.173)
Financial constraint$_{t-1}$	0.356***	0.0502	0.256***	0.0726	0.413***	0.889***	0.308*	0.304*
	(0.0770)	(0.0835)	(0.0589)	(0.0550)	(0.131)	(0.255)	(0.176)	(0.173)
Good faith$_t$ × Financial constraint$_{t-1}$	0.112*	0.124*	0.118**	0.120**	-0.165	-0.155	-0.391**	-0.368*
	(0.0558)	(0.0632)	(0.0549)	(0.0578)	(0.124)	(0.111)	(0.150)	(0.190)
Observations	8,613	8,089	8,437	7,958	7,030	6,808	8,613	8,089
Adjusted R-squared	0.930	0.931	0.930	0.932	0.929	0.938	0.926	0.930
	Employment (restricted to non-missing wage bill data)							
Good faith$_t$	-0.663	-0.674	-0.565	-0.515	-0.688	-0.636*	0.356	0.348
	(0.407)	(0.464)	(0.355)	(0.382)	(0.456)	(0.361)	(0.227)	(0.214)
Financial constraint$_{t-1}$	0.430***	0.0706	0.310***	0.0894	0.441***	0.961***	-0.0960	0.0352
	(0.0913)	(0.103)	(0.0711)	(0.0575)	(0.118)	(0.248)	(0.0956)	(0.0941)
Good faith$_t$ × Financial constraint$_{t-1}$	0.122*	0.126*	0.126*	0.120	-0.234	-0.228*	-0.308	-0.223
	(0.0698)	(0.0753)	(0.0719)	(0.0724)	(0.145)	(0.121)	(0.239)	(0.270)
Observations	8,390	8,020	8,230	7,891	6,894	6,769	8,390	8,020
Adjusted R-squared	0.933	0.935	0.933	0.936	0.934	0.944	0.927	0.935
Controls								
Serfling (2016)	YES	NO	YES	NO	YES	NO	YES	NO
Michaels et al. (2019)	NO	YES	NO	YES	NO	YES	NO	YES
Firm fixed effects	YES	YES	YES	YES	YES	YES	YES	YES
State fixed effects	YES	YES	YES	YES	YES	YES	YES	YES
Industry x Year fixed effects	YES	YES	YES	YES	YES	YES	YES	YES

This table presents the results from OLS regressions relating the wage bill and employment to the *implied contract* and *good faith* exceptions adoption for Compustat non-financial firms from 1967 to 1995. The wage bill and employment are normalized by their sample means. Implied contract$_t$ and Good faith$_t$ are indicator variables set to one if the state at which a firm is headquartered has enacted each exception by year t and zero otherwise. The upper and middle tables use the wage bill as dependent variable, while the bottom table uses employment (restricted to non-missing wage bill data). Odd columns use the firm-level controls from Serfling (2016), while even columns use the controls from Michaels et al. (2019). Table A1 in the Appendix provides variable definitions. In columns (1) to (4), Financial constraint$_{t-1}$ is replaced by firm size (Log of assets or Log of net worth). In columns (5) to (6), Financial constraint$_{t-1}$ is measured by the Hadlock and Pierce (2010) index. In columns (7) and (8), Financial constraint$_{t-1}$ is an indicator variable set to one if a firm is not paying common dividends in year $t-1$ and zero otherwise. All regressions are restricted to firms with available net worth data to facilitate comparability across specifications. Standard errors are clustered at the state-level (standard deviations in parenthesis). *, **, and *** correspond to significance at the 10%, 5%, and 1% levels, respectively.

A Appendix

A.1 Main Proofs

Lemma 1

1. *There is a minimum collateral requirement to obtain credit ($\underline{a}$) and a minimum wealth to obtain a loan to operate efficiently ($\overline{a} > \underline{a}$), given by:*

$$\underline{a} = -\frac{1-\alpha-\beta}{1+\rho} p^{\frac{1}{1-\alpha-\beta}} \left(\frac{\alpha}{R+\phi}\right)^{\frac{\alpha}{1-\alpha-\beta}} \left(\frac{\beta}{\bar{w}}\right)^{\frac{\beta}{1-\alpha-\beta}} \tag{A.1}$$

$$\overline{a} = \frac{\frac{\alpha\phi}{R} - (1-\alpha-\beta)}{1+\rho} p^{\frac{1}{1-\alpha-\beta}} \left(\frac{\alpha}{R}\right)^{\frac{\alpha}{1-\alpha-\beta}} \left(\frac{\beta}{\bar{w}}\right)^{\frac{\beta}{1-\alpha-\beta}} \tag{A.2}$$

2. *Agents with $a < \underline{a}$ become workers, while those with $a \in [\underline{a}, \overline{a})$ operate inefficient firms asking for their maximum allowable debt, which is implicitly given by:*

$$\Pi^E(a,d) = \phi(a+d) \tag{A.3}$$

3. *Agents with $a \in [\overline{a}, k^*)$ ask for a loan $d = k^* - a$ and operate at the efficient scale:*

$$k^* = p^{\frac{1}{1-\alpha-\beta}} \left(\frac{\alpha}{R}\right)^{\frac{1-\beta}{1-\alpha-\beta}} \left(\frac{\beta}{\bar{w}}\right)^{\frac{\beta}{1-\alpha-\beta}} \tag{A.4}$$

$$(1-s)l^* = p^{\frac{1}{1-\alpha-\beta}} \left(\frac{\alpha}{R}\right)^{\frac{\alpha}{1-\alpha-\beta}} \left(\frac{\beta}{\bar{w}}\right)^{\frac{1+\frac{\alpha\beta}{1-\alpha-\beta}}{1-\beta}} \tag{A.5}$$

4. *Agents with $a \geq k^*$ self-finance an efficient firm and deposit $a - k^*$ in the banking system.*

Proof: Based on equation (2.9), the entrepreneur's problem can be restated as:[14]

$$\max_d \left\{ \Pi^E(a,d) = (1-\beta)\chi(\bar{w})(a+d)^{\frac{\alpha}{1-\beta}} - R(a+d) + (1+\rho)a \right\}$$

$$s.t.\ \ \Pi(a,d) \geq \phi(a+d),$$

where I have defined $\chi(\bar{w}) \equiv p^{\frac{1}{1-\beta}} \left(\frac{\beta}{\bar{w}}\right)^{\frac{\beta}{1-\beta}}$. The unrestricted solution to this problem gives the optimal capital $k^* = \left(\frac{\alpha\chi(\bar{w})}{R}\right)^{\frac{1-\beta}{1-\alpha-\beta}}$, which leads to (A.4). Replacing (A.4) into (2.8) gives (A.5). Also, note that agents with $a \geq k^*$ find it optimal to invest k^* and deposit $a - k^*$ at the interest rate ρ.

To show items 1 and 2 of the lemma, define the incentive compatibility function:

$$\Psi(a,d) = \Pi(a,d) - \phi(a+d) = (1-\beta)\chi(\bar{w})(a+d)^{\frac{\alpha}{1-\beta}} - (R+\phi)(a+d) + (1+\rho)a \qquad \text{(A.6)}$$

In what follows, I use $(\cdot)_z$ to denote the derivative with respect to z. Note that Ψ is strictly concave in d ($\Psi_{dd} < 0$), thus for any a it reaches a maximum at some debt level $d^M(a)$ given by:

$$\Psi_d(a, d^M) = 0 \Leftrightarrow MPK(k = a + d^M) = R + \phi \Leftrightarrow d^M(a) = \left(\frac{\alpha\chi(\bar{w})}{R+\phi}\right)^{\frac{1-\beta}{1-\alpha-\beta}} - a, \qquad \text{(A.7)}$$

where $MPK(k) \equiv \alpha\chi(w)(k)^{\frac{\alpha}{1-\beta}-1}$. Evaluating the incentive compatibility function at $d^M(a)$ gives:

$$\Psi(a, d^M(a)) = (1-\alpha-\beta)\left(\frac{\alpha}{R+\phi}\right)^{\frac{\alpha}{1-\alpha-\beta}} \chi(\bar{w})^{\frac{1-\beta}{1-\alpha-\beta}} + (1+\rho)a \qquad \text{(A.8)}$$

Since $\Psi(a, d^M(a))$ is strictly increasing in a, there is a minimum collateral to obtain a loan $\underline{a}$: $\Psi(\underline{a}, d^M(\underline{a})) = 0$. This condition gives rise to equation (A.1).[15] At the minimum collateral, agents

[14] The occupational constraint (2.6) defines a critical wealth level ($\hat{a}$) above which agents prefer to become entrepreneurs, while the incentive compatibility constraint defines a minimum collateral to obtain credit ($\underline{a}$). Thus, occupational choice is determined by comparing $\hat{a}$ and $\underline{a}$. For simplicity, I work with the case $\underline{a} > \hat{a}$, so agents that can obtain credit become entrepreneurs. Fischer and Huerta (2021) show that the qualitative properties of the model remain unchanged under the different arrangements that could arise between $\hat{a}$ and $\underline{a}$.

[15] While $\underline{a}$ is negative, the capital invested by an agent with $\underline{a}$ is positive: $\underline{k} = \left(\frac{\alpha}{R+\phi}\right)^{\frac{1-\beta}{1-\alpha-\beta}} p^{\frac{1}{1-\alpha-\beta}} \left(\frac{\beta}{\bar{w}}\right)^{\frac{\beta}{1-\alpha-\beta}}$. Note that $\underline{a}$ can be forced to be positive by introducing a fixed cost of operating a firm. Nevertheless, the sign of $\underline{a}$ is irrelevant for the model's theoretical predictions.

operate at an inefficient scale since $\Psi_d\left(\underline{a}, d^M(\underline{a})\right) = 0$ implies that $MPK(k = \underline{a} + d^M(\underline{a})) = R + \phi$.

Agents with $a < \underline{a}$ have $\Psi(a, d) < 0$ for all $d > 0$, thus do not obtain credit and become workers. Those with $a \geq \underline{a}$ obtain credit, their maximum allowable loan d is given by the highest solution of $\Psi(a, d) = 0$. Implicit differentiation of $\Psi(a, d) = 0$ gives: $d_a = \frac{1+\rho}{R+\phi-MPK(k)} - 1 > 0$, since $MPK(k) \in [R, R + \phi]$. By continuity of $\Psi(a, d)$ in (a, d), there is a wealth cutoff $\overline{a} > \underline{a}$ such that the maximum allowable debt allows the agent to operate efficiently:

$$\Psi(\overline{a}, k^* - \overline{a}) = 0 \Leftrightarrow (1 - \beta)\chi(\bar{w}){k^*}^{\frac{\alpha}{1-\beta}} - (R + \phi)k^* + (1 + \rho)\overline{a} = 0 \tag{A.9}$$

Replacing (A.4) in (A.9) and solving for $\overline{a}$ gives (A.2). This concludes the proof. ■

Lemma 2 *Consider a marginal increase in the strength of EPL, then the wage rate w^i goes down. If $i \in (0, 1)$, then the* expected wage *$\bar{w}^i$ increases. If $i = 0$, $\bar{w}^i$ remains unchanged.*

Proof: Suppose that $i = 0$ and differentiate (2.15) in terms of φ to obtain:

$$\int_{\underline{a}}^{\overline{a}} l_\varphi g(a)da - \underline{a}_\varphi(1 + \underline{l})g(\underline{a}) + l^*_\varphi(1 - G(\underline{a})) = 0, \tag{A.10}$$

Differentiating (A.1), (A.5) and (2.8) gives:

$$\underline{a}_\varphi = -\underline{a}\frac{\beta}{1-\alpha-\beta}\frac{\bar{w}_\varphi}{\bar{w}}, \tag{A.11}$$

$$l^*_\varphi = -l^*\frac{1 + \frac{\alpha\beta}{1-\alpha-\beta}}{1-\beta}\frac{\bar{w}_\varphi}{\bar{w}}, \tag{A.12}$$

$$l_\varphi = \frac{l}{1-\beta}\left(-\frac{\bar{w}_\varphi}{\bar{w}} + \frac{\alpha}{k}d_\varphi\right) = -\frac{l}{(1-\beta)}\frac{\bar{w}_\varphi}{\bar{w}}\left(1 + \frac{\beta MPK(k)}{R + \phi - MPK(k)}\right) \tag{A.13}$$

where in the last line I have implicitly differentiated $\Psi(a, d) = 0$ and obtained that $d_\varphi = \frac{\beta}{\alpha}\frac{\bar{w}_\varphi}{\bar{w}}\frac{MPK(k)\ k}{MPK(k)-(R+\phi)}$. Replacing equations (A.11) to (A.13) in (A.10) gives:

$$\frac{\bar{w}_\varphi}{\bar{w}} \cdot \left[-\int_{\underline{a}}^{\overline{a}} \frac{l}{(1-\beta)}\left(1 + \frac{\beta MPK(k)}{\phi + R - MPK(k)}\right)g(a)da + \underline{a}\frac{\beta}{1-\alpha-\beta}(1 + \underline{l})g(\underline{a}) - l^*\frac{1 + \frac{\alpha\beta}{1-\alpha-\beta}}{1-\beta}(1 - G(\underline{a}))\right] = 0$$

The term in square brackets is negative (since $MPK(k) \in [R, R+\phi]$), thus $\bar{w}_\varphi = 0$ if $i = 0$. This implies that $w_\varphi = -\frac{s}{1-s(1-\varphi)} w < 0$. When $i \in (0,1)$, wages cannot fully adjust and so $\bar{w}^i_\varphi > 0$. ■

Proposition 1 *A marginal strengthening of EPL reduces firm profits* $\Pi(a,d)$ *and the wage bill* $w^i \cdot l$. *The magnitude of these negative effects is strictly decreasing in firm wealth.*

Proof: Agents with $a \in [\underline{a}, \overline{a})$ ask for their maximum allowable loan: $\Psi(a,d) = 0$. Thus, their profits are given by: $\Pi(a,d) = \phi(a+d)$. Differentiating $\Pi(a,d)$ with respect to φ gives:

$$\Pi_\varphi(a,d) = \phi \cdot d_\varphi = \phi \frac{\beta}{\alpha} \frac{\bar{w}^i_\varphi}{\bar{w}^i} \frac{MPK(k)\, k}{MPK(k) - (R+\phi)} < 0.$$

Differentiate this condition with respect to a to obtain that:

$$\begin{aligned} \Pi_{a\varphi}(a,d) &\propto (1+d_a)[-MPK_k(k)k(R+\phi) + MPK(MPK-(R+\phi))] \\ &\propto MPK\left(MPK - \frac{\alpha}{1-\beta}(R+\phi)\right) > 0 \end{aligned} \tag{A.14}$$

where I have used that $MPK \in [R, R+\phi]$, $MPK_k(k) = -\frac{1-\alpha-\beta}{1-\beta}\frac{MPK(k)}{k}$, $d_a > 0$, and Assumption 1. For the wage bill,

$$(w^i \cdot l)_\varphi \propto w^i_\varphi l + w^i l_\varphi < 0,$$

where I have used that $w^i_\varphi < 0$ and $l_\varphi < 0$ (by equation (A.13)). Differentiating in terms of a:

$$(w^i \cdot l)_{a\varphi} = w^i_\varphi l_a + w^i l_{a\varphi} \tag{A.15}$$

All is left to show is that $(w^i \cdot l)_{a\varphi} > 0$. Differentiate (A.13) in terms of a to obtain:

$$l_{a\varphi} = \frac{l}{k(1-\beta)^2}\frac{\bar{w}^i_\varphi}{\bar{w}^i}\frac{(1+d_a)}{(R+\phi-MPK)^2}\left[\beta(1-\alpha-\beta)(R+\phi)MPK - \alpha(R+\phi-MPK)(R+\phi-(1-\beta)MPK)\right], \tag{A.16}$$

where I have differentiated (2.8) to obtain $l_a = \frac{\alpha}{1-\beta}\frac{l}{k}(1+d_a)$. Denote the term in brackets by x. To show that $l_{a\varphi} > 0$, use Assumption 1 to conclude that:

$$x > \beta(1-\alpha-\beta)(R+\phi)R - \alpha\phi(\beta R+\phi) > (\beta R+\phi)(R\beta(1-\alpha-\beta)-\alpha\phi) > 0$$

Replace l_a and (A.16) in (A.15) to obtain that:

$$(w^i \cdot l)_{a\varphi} = \frac{l}{k}\frac{(1+d_a)}{1-\beta}\left[\alpha w^i_\varphi + \frac{w^i \bar{w}^i_\varphi}{\bar{w}^i}\frac{x}{(1-\beta)(R+\phi-MPK)^2}\right] \tag{A.17}$$

Denote the term in brackets by y and use the lower bound for x to obtain that:

$$y > \alpha w^i_\varphi + \frac{w^i \bar{w}^i_\varphi}{\bar{w}^i}\underbrace{\frac{\phi+\beta R}{\phi^2(1-\beta)}(R\beta(1-\alpha-\beta)-\alpha\phi)}_{\lambda} = \alpha w^i_\varphi + \frac{\bar{w}^i_\varphi(1-s)}{p(1-s(1-\varphi))}\lambda$$

Use that $w^i_\varphi = w_\varphi(1-i)$, $w_\varphi = -\frac{s}{1-s(1-\varphi)}w$, and that $\bar{w}^i_\varphi = \frac{ps}{1-s}w^i + \frac{p(1-s(1-\varphi))}{1-s}w^i_\varphi$ to conclude that:

$$y > \frac{s}{1-s(1-\varphi)}\left(-w(\alpha+\lambda)(1-i)+\lambda w^i\right) > \frac{s}{1-s(1-\varphi)}w\left((\alpha+\lambda)(i-1)+\lambda\right) > 0,$$

where I used that $w^i > w$ and Assumption 1. Thus, $(w^i \cdot l)_{a\varphi} > 0$, which concludes the proof. ■

Proposition 2 *Consider a marginal strengthening of EPL. Then, there exist wealth cutoffs $a^E, a^W \in (\underline{a}, \overline{a}]$ and a wage rigidity threshold $\bar{i} \in (0,1)$ such that:*

1. *Profits $\Pi(a,d)$ fall in firms with $a < a^E$ and rise in firms with $a > a^E$.*

2. *If $i > \bar{i}$, the wage bill $w \cdot l$ falls in firms with $a < a^W$ and rises in firms with $a > a^W$.*

Proof: To simplify exposition, I consider an economy in which either ρ or q is endogenous, but not both simultaneously. The results extend to the case in which both prices respond to EPL. When ρ is endogenous, the effect of φ on d, $\underline{a}$, and k^* are given by:

$$d_\varphi = \frac{l\bar{w}^i_\varphi + d\rho_\varphi}{MPK - (R+\phi)},\ \underline{a}_\varphi = -\frac{\underline{a}}{1-\alpha-\beta}\left(\beta\frac{\bar{w}^i_\varphi}{\bar{w}^i} + \alpha\frac{\rho_\varphi}{R+\phi}\right),\ k^*_\varphi = \frac{-k^*}{1-\alpha-\beta}\left(\beta\frac{\bar{w}^i_\varphi}{\bar{w}^i} + (1-\beta)\frac{\rho_\varphi}{R}\right), \tag{A.18}$$

when q is endogenous, these effects are given by:

$$d_\varphi = \frac{l\bar{w}^i_\varphi - q_\varphi\frac{MPK}{\alpha}}{MPK - (R+\phi)},\ \underline{a} = -\frac{\underline{a}}{1-\alpha-\beta}\left(\beta\frac{\bar{w}^i_\varphi}{\bar{w}^i} - \alpha\frac{q_\varphi}{q}\right),\ k^*_\varphi = -\frac{k^*}{1-\alpha-\beta}\left(\beta\frac{\bar{w}^i_\varphi}{\bar{w}^i} - (1-\beta)\frac{q_\varphi}{q}\right). \tag{A.19}$$

Differentiation of (3.2) gives:

$$\int_{\underline{a}}^{\overline{a}} d_\varphi\ g(a)da - \underline{k}\ g(\underline{a})\underline{a}_\varphi + k^*_\varphi(1 - G(\underline{a})) = 0 \tag{A.20}$$

Using equation (A.18) leads to:

$$\underbrace{\bar{w}^i_\varphi}_{>0}\underbrace{\left(\int_{\underline{a}}^{\overline{a}} \frac{l}{MPK-(R+\phi)}g(a)da + \frac{\beta}{(1-\alpha-\beta)\bar{w}^i}[\underline{k}\ \underline{a}g(\underline{a}) - k^*(1-G(\underline{a}))]\right)}_{<0} = -\rho_\varphi\underbrace{\left(\int_{\underline{a}}^{\overline{a}} \frac{d}{MPK-(R+\phi)}g(a)da + \frac{1}{(1-\alpha-\beta)}\left[\frac{\alpha}{R+\phi}\underline{k}\ \underline{a}g(\underline{a}) - \frac{(1-\beta)}{R}k^*(1-G(\underline{a}))\right]\right)}_{<0}$$ Thus,

the interest rate falls when EPL improves ($\rho_\varphi < 0$). Similarly, when q is endogenous, differentiation of (3.3) gives that $q_\varphi > 0$:

$$\underbrace{\bar{w}^i_\varphi}_{>0}\underbrace{\left(\int_{\underline{a}}^{\overline{a}} \frac{MPK\ l}{MPK-(R+\phi)}g(a)da + \frac{\beta}{(1-\alpha-\beta)\bar{w}^i}[f(\underline{k})\ \underline{a}g(\underline{a}) - Rk^*(1-G(\underline{a}))]\right)}_{<0} = q_\varphi\underbrace{\left(\int_{\underline{a}}^{\overline{a}} \frac{MPK^2}{\alpha(MPK-(R+\phi))}g(a)da + \frac{1}{(1-\alpha-\beta)q}[\alpha f(\underline{k})\ \underline{a}g(\underline{a}) - (1-\beta)Rk^*(1-G(\underline{a}))]\right)}_{<0}$$

To compute the effects on profits, differentiate Π^E at k^* and evaluate at $a = \overline{a}$ to obtain that: $\Pi^E_\varphi(k^*) = \frac{(1-\alpha-\beta)R}{1-\beta}k^*_\varphi + \rho_\varphi\overline{a}$. Assumption 1 and (A.2) imply that the second term is positive. Suppose that $d_\varphi < 0$ for $a \in [\underline{a}, \overline{a})$. Then, since $\underline{a}_\varphi > 0$, condition (A.20) implies that $k^*_\varphi > 0$, and thus $\Pi^E_\varphi(k^*) > 0$. Since $\Pi_{a\varphi} > 0$ there exists a unique cutoff $a^E \in (\underline{a}, \overline{a}]$ above which profits increase with φ. The proof is analogous when q is endogenous.

Differentiating the wage bill at the optimal operation scale gives:

$$(w^i \cdot l^*)_\varphi = w^i_\varphi l^* + w^i l^*_\varphi = \frac{s}{1 - s(1-\varphi)}(i-1)wl^* + w^i l^*_\varphi$$

Note first that $\lim_{i\to 0}(w^i \cdot l^*)_\varphi = w^i_\varphi l^* < 0$, since $\bar{w}^{i=0} = 0$ implies that $l^*_\varphi = 0$. Second, observe that $\lim_{i\to 1}(w^i \cdot l^*)_\varphi = w^i l^*_\varphi > 0$ because $k^*_\varphi > 0$ implies that $l^*_\varphi > 0$. Third, $\frac{\partial (w^i \cdot l^*)_\varphi}{\partial i} > 0$, thus there exists a wage rigidity level $i > \bar{i}$ such that $(w^i \cdot l^*)_\varphi > 0$. Finally, Proposition 1 shows that $(w^i \cdot l)_{a\varphi} > 0$. Hence, given $i > \bar{i}$, there exists a wealth level $a^W \in (\underline{a}, \overline{a})$ such that $(w^i \cdot l)_\varphi > 0$ for $a > a^W$. ■

A.2 Dynamic extension with endogenous separation

This section builds a simple dynamic extension that illustrates how a dismissal cost takes the form of a wedge on labor, as in the static baseline model. To focus on effective labor costs, I abstract from capital and debt.

A.2.1 The model

Consider a firm that operates for infinite periods and decides how much labor to hire in each period, l_t. The firm faces stochastic productivity shocks z_t that, if negative, may trigger dismissals. Each dismissed worker receives a severance pay $\varphi \cdot w_t$. The separation rate s_t is given by:

$$s_t = \bar{s} + (1-\bar{s}) \cdot \max\left\{1 - \frac{l_t}{l_{t-1}}, 0\right\}, \quad \bar{s} \in (0,1). \tag{A.21}$$

Separations occur from two sources: (i) an exogenous turnover component $\bar{s}$ (e.g., quits, retirements), and (ii) and an endogenous component generated when a firm actively reduces its workforce. The latter captures the dismissal margin through which EPL distorts employment decisions.

Given l_{t-1}, discounted profits are:

$$v(l_{t-1}) = \max_{\{l_{t+j}\}_{j=0}^{\infty}} \left\{ \mathbb{E}_t \left[\sum_{j=0}^{\infty} \beta^j \Pi_{t+j}(l_{t+j}, l_{t-1+j}) \right] \right\},$$

where $\Pi_t(l_t, l_{t-1}) = z_t((1-s_t)l_t)^{\alpha} - w_t(1-s_t)l_t - \varphi w_t s_t l_t$, with $\alpha \in (0,1)$ and $\beta \in (0,1)$. Further, define $MPL_t \equiv \alpha z_t((1-s_t)l_t)^{\alpha-1}(1-s_t)$.

A.2.2 Hiring decisions

Consider a marginal worker hired in period t. Define,

$$P_t^j = Pr[\text{hired for } j \text{ periods}] = \Pi_{k=1}^{j}(1-s_{t+k}), \text{ with } P_t^0 = 1$$
$$Q_t^j = Pr[\text{laid off at } t+j] = s_{t+j} \cdot \left(\Pi_{k=1}^{j-1}(1-s_{t+k})\right).$$

Define the partial derivatives $P'^j_t \equiv \frac{\partial P_t^j}{\partial l_t}$ and $Q'^j_t \equiv \frac{\partial Q_t^j}{\partial l_t}$. The expected marginal benefit of the hire is:

$$MB_t^{hire} = \mathbb{E}_t\left[\sum_{j=0}^{\infty} \beta^j MPL_{t+j} \cdot P_t^j\right] + \mathbb{E}_t\left[\sum_{j=0}^{\infty} \beta^j MPL_{t+j} \cdot l_{t+j} \cdot P'^j_t\right]. \tag{A.22}$$

The expected marginal cost of that hire is:

$$MC_t^{hire} = \underbrace{\mathbb{E}_t\left[\sum_{j=0}^{\infty} \beta^j w_{t+j} \cdot P_t^j + \sum_{j=1}^{\infty} \beta^j \varphi w_{t+j} \cdot Q_t^j\right]}_{\text{wage+severance increase}} + \underbrace{\mathbb{E}_t\left[\sum_{j=0}^{\infty} \beta^j w_{t+j} l_{t+j} \cdot P'^j_t + \sum_{j=1}^{\infty} \beta^j \varphi w_{t+j} l_{t+j} \cdot Q'^j_t\right]}_{\text{separation increase}}. \tag{A.23}$$

The firm chooses l_t so that $MB_t^{hire} = MC_t^{hire}$. Hiring a worker generates two costs: (i) it increases expected severance incurred in future periods and (ii) it increases the expected future separation rate under negative shocks.

A.2.3 The labor wedge

Another way of expressing (A.23) is as follows:

$$MC_t^{hire} = \underbrace{\mathbb{E}_t\left[\sum_{j=0}^{\infty}\beta^j w_{t+j}\cdot(P_t^j + P'^j_t l_{t+j})\right]}_{\text{labor cost}} + \underbrace{\varphi\cdot\mathbb{E}_t\left[\sum_{j=1}^{\infty}\beta^j w_{t+j}\left(Q_t^j + l_{t+j}Q'^j_t\right)\right]}_{\text{labor wedge}}.$$

Thus, the dismissal cost acts as a labor "wedge" on hiring. To make this more clear, consider a steady state with a fixed long-run productivity $\tilde{z}$. Denote the stationary labor by $\tilde{l}$ and wage rate by $\tilde{w}$. Equation (A.22) reads as:

$$MB^{hire} = \tilde{MPL}\sum_{j=0}^{\infty}\beta^j(1-\bar{s})^j = \frac{\tilde{MPL}}{1-\beta(1-\bar{s})}, \tag{A.24}$$

where $\tilde{MPL} = \alpha\tilde{z}((1-\bar{s})\tilde{l})^{\alpha}(1-\bar{s})$, while (A.23) becomes:

$$MC_t^{hire} = \tilde{w}\left(\sum_{j=0}^{\infty}\beta^j(1-\bar{s})^j + \varphi\cdot\beta^{j+1}\bar{s}(1-\bar{s})^j\right) = \tilde{w}\left(\frac{1}{1-\beta(1-\bar{s})} + \underbrace{\varphi\cdot\frac{\bar{s}\beta}{1-\beta(1-\bar{s})}}_{\text{labor wedge}}\right). \tag{A.25}$$

Thus, in steady state, a dismissal cost acts as a tax $\tau = \varphi\cdot\frac{\bar{s}\beta}{1-\beta(1-\bar{s})}$ on labor, which is proportional to dismissal protection φ. This maps the static wedge in the baseline model to the present value of expected severance in a dynamic model.

A.3 Additional tables

Table A1: Variable definitions

Variable	**Description (Compustat variable names in parentheses where appropriate)**
Dependent variables	
EBITDA	Earnings before interest, taxes, depreciation, and amortization (EBITDA)
Gross profits after interest	Sales (SALE) minus interest expenses (XINT) and operating costs (COG)
Capital expenditures	Cash outflow or the funds used for additions to the company's property, plant and equipment, excluding amounts arising from acquisitions (CAPX)
Debt	Long-term debt (DLTT) plus debt in current liabilities (DLC)
Cost of debt	Total interest and related expenses (XINT) divided by book value of debt
Exit	Indicator equal to one if the firm is present in year t but absent in year $t+1$, and its delisting reason is either acquisition, merger, bankruptcy, or liquidation (*DLRSN*)
Entry	Indicator equal to one in the firm's first year in Compustat or upon reentry after an exit
Wage bill	Salaries, wages, pension costs, profit sharing and incentive compensation, payroll taxes and other employee benefits (XLR)
Control variables	
Implied contract	An indicator variable set to one if the state in which the firm is headquartered adopted the *implied contract exception*
Good faith	An indicator variable set to one if the state in which the firm is headquartered adopted the *good faith exception*
Public policy	An indicator variable set to one if the state in which the firm is headquartered adopted the *public policy exception*
Assets	Total value of book assets (AT)
Net worth	Shareholders' equity (assets minus liabilities) (SEQ)
Profitability	Income before extraordinary items (IB) plus depreciation and amortization (DP) divided by the book value of assets (AT)
Fixed assets	Property, plant and equipment (PPENT) divided by the book value of assets (AT)
Market to book	The market value of assets (AT+PRCC_F*CSHO-CEQ) divided by the book value of assets (AT)
Dividend payer	An indicator variable set to one if the firm pays a common dividend (DVC)
Modified z-score	The modified Altman's z-score (1.2*WCAP+1.4*RE+3.3*EBIT+SALE)/AT
Sales	Gross sales (SALE)
Book leverage	Book value of long-term debt (DLTT) plus debt in current liabilities (DLC) divided by book value of assets (AT)
State per capita GDP	State's GDP divided by its total population
State GDP growth	State-level GDP growth
Circuit implied contract	Fraction of other states in the same federal circuit as the firm's headquarter state that have adopted the *implied contract exception*.
Circuit good faith	Fraction of other states in the same federal circuit as the firm's headquarter state that have adopted the *good faith exception*.
Circuit public policy	Fraction of other states in the same federal circuit as the firm's headquarter state that have adopted the *public policy exception*.
Right-to-work	An indicator variable set to one if the state in which the firm is headquartered has adopted the right-to-work laws
Union membership	Fraction of employees who are covered by collective bargaining agreements in a given state
Political balance	Fraction of Democrat state representatives in the House of Representatives and Senate

Table A2: The implied contract exception and the timing of profits and the wage bill

	EBITDA				Wage bill							
	Log Assets		Log Net Worth		Log Assets		Log Net Worth		Log Assets		Log Net Worth	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Implied contract^{-2}	-0.296	-0.236	-0.226	-0.151	-0.204	-0.219	-0.115	-0.146	-0.125	-0.219	-0.0901	-0.187
	(0.185)	(0.141)	(0.151)	(0.111)	(0.184)	(0.166)	(0.180)	(0.149)	(0.223)	(0.205)	(0.213)	(0.188)
Implied contract^{-1}	-0.245*	-0.173	-0.181	-0.0872	-0.225	-0.201	-0.165	-0.189	-0.110	-0.222	-0.0999	-0.205
	(0.143)	(0.133)	(0.114)	(0.107)	(0.288)	(0.193)	(0.291)	(0.182)	(0.334)	(0.249)	(0.328)	(0.236)
Implied contract^{0}	-1.766	-1.634	-1.383	-1.142	-1.638*	-0.158	-1.374**	-0.531	-1.393	-0.0479	-1.378*	-0.632
	(1.412)	(1.426)	(1.151)	(1.121)	(0.824)	(0.890)	(0.649)	(0.507)	(1.017)	(1.050)	(0.798)	(0.561)
Implied contract^{+1}	-1.690	-1.596	-1.332	-1.129	-1.643*	-0.102	-1.385*	-0.510	-1.276	0.0710	-1.281	-0.557
	(1.419)	(1.434)	(1.156)	(1.126)	(0.895)	(0.923)	(0.748)	(0.542)	(1.100)	(1.094)	(0.905)	(0.604)
Implied contract^{+2}	-2.590*	-2.472*	-2.063*	-1.845	-1.774*	-0.314	-1.427	-0.687	-1.484	-0.240	-1.407	-0.808
	(1.421)	(1.422)	(1.158)	(1.115)	(0.958)	(0.908)	(0.869)	(0.530)	(1.129)	(1.073)	(0.990)	(0.591)
Implied contract^{-2} × Size$_{t-1}$	0.0453	0.0509	0.0365	0.0412	0.0161	0.0371	0.00782	0.0295	0.0106	0.0339	0.00715	0.0329
	(0.0337)	(0.0316)	(0.0327)	(0.0301)	(0.0205)	(0.0248)	(0.0211)	(0.0237)	(0.0254)	(0.0294)	(0.0268)	(0.0293)
Implied contract^{-1} × Size$_{t-1}$	0.0273	0.0361	0.0153	0.0241	0.00942	0.0445	0.00983	0.0462	0.00658	0.0437	0.00648	0.0454
	(0.0291)	(0.0286)	(0.0288)	(0.0275)	(0.0255)	(0.0292)	(0.0273)	(0.0297)	(0.0323)	(0.0355)	(0.0354)	(0.0366)
Implied contract^{0} × Size$_{t-1}$	0.295	0.318	0.256	0.280	0.193*	0.0654	0.212**	0.136	0.190	0.0487	0.227**	0.143
	(0.252)	(0.250)	(0.239)	(0.237)	(0.114)	(0.134)	(0.0895)	(0.0989)	(0.129)	(0.155)	(0.103)	(0.108)
Implied contract^{+1} × Size$_{t-1}$	0.276	0.299	0.240	0.263	0.180	0.0481	0.203**	0.123	0.171	0.0258	0.214*	0.125
	(0.254)	(0.253)	(0.241)	(0.240)	(0.111)	(0.140)	(0.0908)	(0.106)	(0.128)	(0.163)	(0.106)	(0.116)
Implied contract^{+2} × Size$_{t-1}$	0.480*	0.489*	0.442*	0.451*	0.217**	0.0834	0.238***	0.155	0.222*	0.0756	0.261***	0.171
	(0.251)	(0.249)	(0.237)	(0.236)	(0.104)	(0.138)	(0.0842)	(0.103)	(0.117)	(0.159)	(0.0962)	(0.113)
Observations	85,693	85,754	85,693	85,754	7,803	8,032	7,803	8,032	7,295	7,550	7,295	7,550
Adjusted R-squared	0.846	0.845	0.844	0.844	0.930	0.928	0.929	0.927	0.930	0.928	0.930	0.928
Controls												
Serfling (2016)	YES	YES	YES	YES	YES	YES	YES	YES	NO	NO	NO	NO
Michaels at al. (2019)	NO	NO	NO	NO	NO	NO	NO	NO	YES	YES	YES	YES
State control variables	NO	YES	NO	YES	NO	YES	NO	YES	NO	YES	NO	YES
Firm fixed effects	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
State fixed effects	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
Industry x Year fixed effects	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
State x Year fixed effects	YES	NO	YES	NO	YES	NO	YES	NO	YES	NO	YES	NO

This table presents the results from OLS regressions relating profits and the wage bill to the *implied contract exception* adoption for Compustat non-financial firms from 1967 to 1995. EBITDA is earnings before interest, taxes, and depreciation. The wage bill is item *XLR* from Compustat. Both measures were scaled by their sample mean. Implied contract^{-1} is an indicator variable set to one if the state at which a firm is headquartered will adopt the *implied contract exception* in one year and zero otherwise. Implied contract^{0} is an indicator variable set to one if the state at which a firm is headquartered adopts the exception in the current year and zero otherwise. Implied contract^{+1} is an indicator variable set to one if the state at which a firm is headquartered adopted the exception one year ago and zero otherwise. Implied contract^{+2} is an indicator variable set to one if the state at which a firm is headquartered adopted the exception two years or more years ago and zero otherwise. Table A1 provides variable definitions. Columns (1) to (8) use the control variables from Serfling (2016), columns (9) to (12) use the controls from Michaels et al. (2019). All regressions include firm fixed effects, state-level fixed effects, and industry-year fixed effects. Odd columns include state-year fixed effects instead of state-level control variables. Standard errors are clustered at the state-level (standard deviations in parenthesis). *, **, and *** correspond to significance at the 10%, 5%, and 1% levels, respectively.

Table A3: Controlling for political factors

	EBITDA	Profits-interest	Employment	Cap. Expenditures	Debt	Cost of debt	Exit	Entry
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Log Net worth							
Implied contract $_t$	-0.442	-0.769**	-0.524***	-0.147	-0.925***	0.00676	0.0618***	-0.00325
	(0.274)	(0.295)	(0.179)	(0.303)	(0.236)	(0.403)	(0.00761)	(0.00725)
Log Net worth$_{t-1}$	0.300***	0.329***	0.378***	0.368***	0.351***	-0.0739	0.00460**	-0.000209
	(0.0566)	(0.0512)	(0.0423)	(0.0396)	(0.0732)	(0.0857)	(0.00185)	(0.000573)
Implied contract$_t$ × Log Net worth$_{t-1}$	0.0968	0.159**	0.116***	0.0572	0.221***	-0.0145	-0.0108***	0.000508
	(0.0648)	(0.0688)	(0.0338)	(0.0690)	(0.0596)	(0.0680)	(0.00107)	(0.000754)
Union Membership$_t$	0.00858	-0.00136	-0.00424	0.00312	-0.00780	0.0210	0.00145**	-0.000265
	(0.00678)	(0.00806)	(0.0110)	(0.00979)	(0.00895)	(0.0213)	(0.000619)	(0.000476)
Right-to-work$_t$	0.405**	0.530	0.358	0.419***	-0.549***	1.822*	-0.0103	0.00752
	(0.176)	(0.319)	(0.303)	(0.138)	(0.193)	(0.972)	(0.0117)	(0.00620)
Political balance$_t$	-0.183	0.0608	-0.223	-0.254	-0.0748	0.0936	0.0154	0.0212
	(0.211)	(0.253)	(0.205)	(0.222)	(0.283)	(0.562)	(0.0162)	(0.0177)
Observations	83,327	81,027	80,306	82,484	83,483	67,771	83,717	83,717
Adjusted R-squared	0.848	0.871	0.868	0.819	0.781	0.358	0.303	0.0979
	SA Index (Hadlock and Pierce, 2010)							
Implied contract $_t$	-0.581*	-0.945**	-0.721***	-0.315	-1.197***	-0.808	0.0709***	-0.00245
	(0.309)	(0.398)	(0.149)	(0.337)	(0.237)	(0.485)	(0.0124)	(0.00919)
SA index$_{t-1}$	0.205	0.0704	-0.134	0.0640	0.318**	-0.639*	-0.0249***	-0.000443
	(0.126)	(0.155)	(0.128)	(0.120)	(0.127)	(0.330)	(0.00559)	(0.00164)
Implied contract$_t$ × SA index$_{t-1}$	-0.185*	-0.284**	-0.226***	-0.141	-0.382***	-0.287***	0.0190***	-0.000556
	(0.107)	(0.136)	(0.0526)	(0.113)	(0.0896)	(0.0948)	(0.00353)	(0.00169)
Union Membership$_t$	0.00621	-0.00408	-0.00643	0.00249	-0.00386	0.0426	0.00203***	-0.000374
	(0.00716)	(0.00910)	(0.0118)	(0.0102)	(0.00822)	(0.0267)	(0.000659)	(0.000422)
Right-to-work$_t$	0.503**	0.685**	0.541	0.545***	-0.482**	1.916*	-0.00461	0.0101
	(0.214)	(0.340)	(0.345)	(0.195)	(0.226)	(1.039)	(0.0146)	(0.00613)
Political balance$_t$	-0.200	0.0997	-0.176	-0.246	-0.0307	-0.527	0.0134	0.0172
	(0.228)	(0.304)	(0.242)	(0.236)	(0.331)	(0.921)	(0.0190)	(0.0166)
Observations	75,052	73,037	72,795	75,072	75,039	61,663	75,072	75,072
Adjusted R-squared	0.843	0.869	0.866	0.810	0.787	0.383	0.312	0.100
Firm fixed effects	YES	YES	YES	YES	YES	YES	YES	YES
State fixed effects	YES	YES	YES	YES	YES	YES	YES	YES
Industry x Year fixed effects	YES	YES	YES	YES	YES	YES	YES	YES

This table presents the results from OLS regressions relating EBITDA, gross profits after interest, employment, capital expenditures, debt, the cost of debt, exit, and entry to the adoption of the *implied contract exception* for Compustat non-financial firms from 1967 to 1995. All variables are normalized by their sample means. Implied contract$_t$ is an indicator variable set to one if the state at which a firm is headquartered has enacted the *implied contract exception* by year t and zero otherwise. Table A1 provides variable definitions. All regressions include firm fixed effects, state-level fixed effects, and industry-year fixed effects. The firm and state-level controls used in Table 5 are included in all regressions. The upper table interacts Implied contract$_t$ with the lagged Log of Net Worth, while the bottom table uses the SA index introduced by Hadlock and Pierce (2010). Three additional state-level controls are included. (1) Union membership$_t$: the fraction of employees who are covered by collective bargaining agreements at year t. (2) Right-to-work$_t$: an indicator variable set to one if the state in which the firm is headquartered has passed the right-to-work laws by year t. (3) Political balance$_t$: the fraction of Democrat state representatives in the House of Representatives and Senate. Standard errors are clustered at the state-level (standard deviations in parenthesis). *, **, and *** correspond to significance at the 10%, 5%, and 1% levels, respectively.

Table A4: Alternative headquarters locations

	EBITDA	Profits-interest	Employment	Cap. Expenditures	Debt	Cost of debt	Exit	Entry
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
				Log Net worth				
Implied contract$_t$	-0.416**	-0.706***	-0.481***	-0.127	-0.811***	-0.0273	0.0589***	-0.00204
	(0.167)	(0.203)	(0.112)	(0.221)	(0.145)	(0.785)	(0.00903)	(0.00612)
Log Net worth$_t$	0.281***	0.274***	0.332***	0.352***	0.324***	-0.0157	0.00674***	0.000137
	(0.0512)	(0.0479)	(0.0515)	(0.0433)	(0.0626)	(0.219)	(0.00212)	(0.000599)
Implied contract$_t$ × Log Net worth$_t$	0.0922**	0.150***	0.112***	0.0512	0.185***	-0.0196	-0.0118***	0.000429
	(0.0379)	(0.0446)	(0.0268)	(0.0492)	(0.0388)	(0.132)	(0.00129)	(0.000630)
Observations	74,494	72,468	72,252	74,515	74,482	61,444	74,515	74,515
Adjusted R-squared	0.852	0.871	0.869	0.818	0.805	0.404	0.314	0.0910
				SA Index (Hadlock and Pierce, 2010)				
Implied contract$_t$	-0.388*	-0.676***	-0.519***	-0.158	-1.013***	-0.981	0.0636***	-0.00207
	(0.205)	(0.239)	(0.140)	(0.222)	(0.200)	(0.873)	(0.0133)	(0.00786)
SA Index$_{t-1}$	0.172**	0.0776	-0.0919	0.0700	0.273**	-0.732	-0.0251***	-0.000441
	(0.0717)	(0.0952)	(0.100)	(0.0703)	(0.111)	(0.512)	(0.00677)	(0.00166)
Implied contract$_t$ × SA index$_{t-1}$	-0.129*	-0.212***	-0.174***	-0.0864	-0.333***	-0.292	0.0189***	-0.000704
	(0.0668)	(0.0784)	(0.0523)	(0.0716)	(0.0817)	(0.194)	(0.00373)	(0.00149)
Observations	75,267	73,251	73,006	75,287	75,254	62,118	75,287	75,287
Adjusted R-squared	0.849	0.867	0.865	0.814	0.795	0.387	0.314	0.103
Firm fixed effects	YES	YES	YES	YES	YES	YES	YES	YES
State fixed effects	YES	YES	YES	YES	YES	YES	YES	YES
Industry x Year fixed effects	YES	YES	YES	YES	YES	YES	YES	YES

This table presents the results from OLS regressions relating EBITDA, gross profits after interest, employment, capital expenditures, debt, the cost of debt, exit and entry to the *implied contract exception* adoption by using a matched sample from Compustat non-financial firms from 1967 to 1995. All these variables are normalized by their sample means. Implied contract$_t$ is an indicator variable set to one if the state at which a firm is headquartered has enacted the *implied contract exception* by year t and zero otherwise. Table A1 provides variable definitions. All regressions include firm fixed effects, state-level fixed effects, and industry-year fixed effects. The firm and state-level controls used in Table 5 are included in all regressions. The upper table interacts Implied contract$_t$ with the lagged Log of Net Worth, while the bottom table uses the SA index introduced by Hadlock and Pierce (2010). Compustat is supplemented by data on historical headquarters locations constructed by Bai et al. (2020). Standard errors are clustered at the state-level (standard deviations in parenthesis). *, **, and *** correspond to significance at the 10%, 5%, and 1% levels, respectively.

Table A5: Propensity score matched samples

	EBITDA	**Profits-interest**	**Employment**	**Cap. Expenditures**	**Debt**	**Cost of debt**	**Exit**	**Entry**
	(1)	**(2)**	**(3)**	**(4)**	**(5)**	**(6)**	**(7)**	**(8)**
	Log Net worth							
Implied contract$_t$	-0.598**	-0.939***	-0.616***	-0.236	-1.028***	0.197	0.0603***	-0.00458
	(0.274)	(0.306)	(0.199)	(0.310)	(0.237)	(0.426)	(0.00802)	(0.00727)
Log Net worth$_{t-1}$	0.312***	0.349***	0.403***	0.385***	0.371***	-0.0403	0.00480***	-0.000378
	(0.0554)	(0.0462)	(0.0427)	(0.0370)	(0.0740)	(0.0966)	(0.00163)	(0.000569)
Implied contract$_t$ × Log Net worth$_{t-1}$	0.133**	0.194***	0.136***	0.0785	0.244***	-0.0425	-0.0105***	0.000670
	(0.0625)	(0.0688)	(0.0369)	(0.0681)	(0.0593)	(0.0723)	(0.00105)	(0.000764)
Observations	82,846	80,401	79,402	81,788	83,042	65,796	83,122	83,122
Adjusted R-squared	0.841	0.862	0.862	0.812	0.774	0.383	0.299	0.0910
	SA Index (Hadlock and Pierce, 2010)							
Implied contract$_t$	-0.582*	-0.922**	-0.719***	-0.319	-1.162***	-0.700	0.0645***	-0.00346
	(0.309)	(0.394)	(0.153)	(0.342)	(0.227)	(0.597)	(0.0132)	(0.00933)
SA Index$_{t-1}$	0.208	0.0457	-0.145	0.0739	0.289**	-0.740*	-0.0244***	0.000450
	(0.129)	(0.151)	(0.134)	(0.122)	(0.139)	(0.417)	(0.00550)	(0.00170)
Implied contract$_t$ × SA index$_{t-1}$	-0.190*	-0.276**	-0.230***	-0.148	-0.374***	-0.270**	0.0175***	-0.000732
	(0.106)	(0.135)	(0.0527)	(0.114)	(0.0855)	(0.134)	(0.00360)	(0.00181)
Observations	72,092	70,081	69,828	71,985	72,082	57,853	72,145	72,145
Adjusted R-squared	0.843	0.869	0.866	0.811	0.789	0.410	0.307	0.0988
Firm fixed effects	YES	YES	YES	YES	YES	YES	YES	YES
State fixed effects	YES	YES	YES	YES	YES	YES	YES	YES
Industry x Year fixed effects	YES	YES	YES	YES	YES	YES	YES	YES

This table presents the results from OLS regressions relating EBITDA, gross profits after interest, employment, capital expenditures, debt, the cost of debt, exit and entry to the *implied contract exception* adoption by using a matched sample from Compustat non-financial firms from 1967 to 1995. All these variables are normalized by their sample means. Propensity scores are estimated based on Log assets, Profitability, Fixed assets, Market to book, Dividend payer, the Modified z-score, and Book leverage. Each treatment firm is matched to a control firm with replacement on year, three-digit SIC industry, and based on the closest propensity score. Implied contract$_t$ is an indicator variable set to one if the state at which a firm is headquartered has enacted the *implied contract exception* by year t and zero otherwise. Table A1 provides variable definitions. All regressions include firm fixed effects, state-level fixed effects, and industry-year fixed effects. The firm and state-level controls used in Table 5 are included in all regressions. The upper table interacts Implied contract$_t$ with the lagged Log of Net Worth, while the bottom table uses the SA index introduced by Hadlock and Pierce (2010). Standard errors are clustered at the state-level (standard deviations in parenthesis). *, **, and *** correspond to significance at the 10%, 5%, and 1% levels, respectively.

Table A6: The *good faith exception* and economic outcomes

	EBITDA	Profits-interest	Employment	Cap. Expenditures	Debt	Cost of debt	Exit	Entry
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Log Net worth							
Good faith_t	-0.449	-0.711^{**}	0.0642	-0.344	-0.544^{**}	0.269	0.0111	-0.0213
	(0.357)	(0.283)	(0.217)	(0.461)	(0.246)	(0.680)	(0.0167)	(0.0155)
Log Net worth_{t-1}	0.309^{***}	0.364^{***}	0.466^{***}	0.350^{***}	0.412^{***}	-0.0641	-0.00154	-0.000515
	(0.0596)	(0.0594)	(0.0727)	(0.0641)	(0.0802)	(0.0884)	(0.00182)	(0.000638)
Good faith $_t$ × Log Net worth_{t-1}	0.146^{**}	0.176^{***}	0.0240	0.154	0.142^{**}	-0.0750	-0.00297	0.00282
	(0.0697)	(0.0591)	(0.0508)	(0.0997)	-0.449	(0.116)	(0.00202)	(0.00218)
Observations	86,957	84,515	83,418	85,970	87,114	71,535	87,354	87,354
Adjusted R-squared	0.891	0.912	0.872	0.870	0.785	0.361	0.300	0.0895
	SA Index (Hadlock and Pierce, 2010)							
Good faith_t	-0.922^{***}	-1.022^{***}	-0.590^{***}	-0.915^{*}	-1.620^{***}	-1.237	-0.0272	-0.0276
	(0.274)	(0.256)	(0.190)	(0.487)	(0.389)	(1.692)	(0.0202)	(0.0202)
SA Index_{t-1}	0.336^{***}	0.219^{**}	-0.122	0.178^{**}	0.560^{**}	-0.711^{**}	-0.0143^{***}	0.000264
	(0.0952)	(0.108)	(0.107)	(0.0873)	(0.232)	(0.308)	(0.00517)	(0.00123)
Good faith_t × SA index_{t-1}	-0.371^{***}	-0.367^{***}	-0.236^{***}	-0.398^{**}	-0.520^{***}	-0.351	-0.00620	-0.00605
	(0.0818)	(0.0861)	(0.0694)	(0.153)	(0.117)	(0.421)	(0.00512)	(0.00479)
Observations	75,729	73,709	73,464	75,749	75,716	63,004	75,749	75,749
Adjusted R-squared	0.887	0.916	0.874	0.862	0.776	0.385	0.309	0.0988
Firm fixed effects	YES	YES	YES	YES	YES	YES	YES	YES
State fixed effects	YES	YES	YES	YES	YES	YES	YES	YES
Industry x Year fixed effects	YES	YES	YES	YES	YES	YES	YES	YES

This table presents the results from OLS regressions relating EBITDA, gross profits after interest, employment, capital expenditures, debt, the cost of debt, exit and entry to the *good faith exception* adoption by using a matched sample from Compustat non-financial firms from 1967 to 1995. All these variables are normalized by their sample means. Good faith_t is an indicator variable set to one if the state at which a firm is headquartered has enacted the *good faith exception* by year t and zero otherwise. Table A1 provides variable definitions. All regressions include firm fixed effects, state-level fixed effects, and industry-year fixed effects. The firm and state-level controls used in Table 5 are included in all regressions. The upper table interacts Good faith_t with the lagged Log of Net Worth, while the bottom table uses the SA index introduced by Hadlock and Pierce (2010). Standard errors are clustered at the state-level (standard deviations in parenthesis). *, **, and *** correspond to significance at the 10%, 5%, and 1% levels, respectively.