Managerial job security and firm diversification

Abstract

We analyze the effects of managerial job security on firm diversification. Our results indicate that enacting legal protection for managers' employment is conducive to less corporate diversification. Our findings suggest that, in relation to managerial entrenchment and empire-building theories, hedging against employment risk is more likely to be the primary factor for managers when deciding to conduct firm diversification. Consistent with the explanation of agency theory in relation to firm diversification, we also document that refocusing firms increase firm value after enacting the implied-contract exception. The incremental firm value likely reflects the improved efficiency of capital allocation across divisions, as we find that firms increase the efficiency of their capital allocation after the adoption of the law.

JEL Classification: L25; J28; G30

Keywords: Corporate diversification; Employment protection; Managerial entrenchment; Agency problem

1. Introduction

A firm's decision to diversify is one of the most important research areas in business and finance studies (see, for example, Hoskisson and Hitt, 1990; Palich, Cardinal, and Miller, 2000; Martin and Sayrak, 2003). Given the documented impact of firms' diversification strategies on their resilience to economic downturns (Almeida, Kim, and Kim, 2015; Kuppuswamy and Villalonga, 2016; Matvos, Seru, and Silva, 2018), risk management (Amihud and Lev, 1981; Lewellen, Loderer, and Rosenfeld, 1989; Shleifer and Vishny, 1991), and capital allocation (Gertner, Scharfstein, and Stein, 1994; Stein, 1997; Matsusaka and Nanda, 2002), the motivations behind these strategies and the performance outcomes of diversified firms continue to attract the attention of researchers. Agency theory is one of the most prevalent explanations for understanding the motives behind firm diversification. The free cash flow theory, developed by Jensen (1986), suggests that firm diversification is an outcome of managerial empire building, while Amihud and Lev (1981) and Shleifer and Vishny (1989) argue that diversification is the outcome of managerial entrenchment, undertaken in order to reduce employment risk. Prior studies find evidence that improved top-level governance impedes a manager's ability to make diversification decisions that negatively affect firm value, a theory which is attributed to the 1980s trend of refocusing on strengthened external governance (see, among others, Shleifer and Vishny, 1991; Kaplan and Weisbach, 1992; Davis, Diekmann, and Tinsley, 1994; Comment and Jarrell, 1995; Denis, Denis, and Sarin, 1997; Bethel, Liebeskind, and Opler, 1998).

Despite considerable evidence in the literature supporting agency problems as explanations for firm diversification, uncertainties remain as to whether firm diversification is motivated by empire building, or is more often driven by managerial entrenchment. This study aims to fill this gap by investigating which motive is more closely connected with diversification decisions. Specifically, we test for changes in firm diversification in response to increased managerial job security. If the motive of empire building dominates a firm's decision to diversify, managers may pursue diversification, due to the reduced

turnover risk and increase in managerial bargaining power. Conversely, if firm diversification is driven by the motive of managerial entrenchment, managers may reduce the level of diversification as their incentive to entrench themselves diminishes.

There are two factors that make it difficult to identify a causal effect of managerial job security on firm diversification. First, the extent of managerial job security is difficult to measure. Second, managerial job security and diversification involves significant endogeneity. For instance, the low ex-ante employment protection leads managers to pursue diversification to increase the value of their human capital, which in turn leads to high ex-post job security. To overcome such problems, we employ a staggered difference-in-differences (DiD) approach, using the enactment of wrongful discharge laws as a quasi-natural experiment. We argue that the implied-contract exception offers legal protection for managers whose employment agreement is implicit. Under the enforcement of this law, managers who implicitly provide assurances of ongoing employment to employees cannot terminate a manager's contract without "good cause", leading to a reduced need to hedge against employment risk through diversification.

Compared to firms not subject to the implied-contract exception, we find that firms exposed to the law reduce their level of diversification by approximately 9%.[1] This reduction appears to occur primarily through divestitures, rather than through a decline in diversified merger and acquisition (M&A) or an increase in non-diversified M&A. This finding alleviates concerns that the observed effect is driven by managers pursuing private benefits through non-diversified M&A or by a diminished demand for the perceived benefits of diversification. Overall, our findings suggest that managerial entrenchment is more likely than empire building to drive firm diversification decisions.

We then conduct cross-sectional tests to examine whether the observed reduction in diversification reflects the alleviation of managerial entrenchment. If this mechanism

[1] To provide economic context, consider a firm with \$10 billion in total assets and an initial diversification level ($1 - HHI(assets)$) of 0.5. A 9% reduction in diversification implies that the diversification level decreases to 0.455, and the $HHI(assets)$ increases from 0.5 to 0.545. This suggests a shift toward greater concentration in asset allocation. For example, if the firm is initially evenly diversified across two segments (each with \$5 billion in assets), achieving the new $HHI(assets)$ of 0.545 requires reallocating assets such that one segment grows to \$6.5 billion and the other shrinks to \$3.5 billion.

holds, the effect should be more pronounced among firms where managers have stronger entrenchment incentives. To capture these incentives, we use the industry homogeneity index, stock-based compensation and the Entrenchment-index (E-index). Firms operating in highly homogeneous industries face lower CEO dismissal costs, which increases the likelihood of forced turnover and outside succession (Parrino, 1997; Gillan, Hartzell, and Parrino, 2009). CEOs with high fixed salaries and no clawback provisions are more likely to engage in entrenchment, while long-term stock-based pay helps align managerial and shareholder interests and mitigates entrenchment (Lewellen, Loderer, and Martin, 1987; Hall and Liebman, 1998; Zhou, 2001; Hu and Kumar, 2004). Consistent with this hypothesis, we find stronger reductions in diversification following the law's adoption among firms with high industry homogeneity, high E-index, and low stock-based compensation, supporting the interpretation that the effect operates through weakened managerial entrenchment.

Finally, we examine whether refocusing decisions following the law's adoption benefit shareholders. If managers pursue diversification primarily for job security, reflecting an agency cost problem that reduces firm value, then a decline in entrenchment motives should result in value-enhancing refocusing. Consistent with this interpretation, we find that segments divested after the law's enactment tend to have lower value than those divested beforehand. Moreover, refocusing decisions made after the law are more value-enhancing compared to those made prior to its adoption. We also find that capital allocation efficiency improves in diversified firms following the law, which explain the observed increase in firm value.

Our paper contributes to the agency theory perspective of firm diversification decisions (e.g., Amihud and Lev, 1981; Jensen, 1986; Shleifer and Vishny, 1989; Gu, Wang, Yao, and Zhang, 2018). Through a DiD analysis of wrongful discharge laws, we document that the motive of managerial entrenchment is more likely to drive diversification decisions than the motive of empire building. This study also contributes to the literature on the diversification discount phenomenon (e.g., Lang and Stulz, 1994; Berger and Ofek, 1995; Campa and Kedia, 2002; Villalonga, 2004). We find that refocusing decisions driven

by a decline in managerial entrenchment increase firm value, which can be attributed to improved efficiency in internal capital allocation. Finally, this study has important implications for both policymakers and stakeholders. For policymakers, understanding firm diversification is crucial, as diversification shapes capital allocation across industries. We show that stronger legal protection of managerial employment can improve the efficiency of capital allocation. For stakeholders, enhancing managerial job security can offer an alternative way to mitigate agency problems, especially in firms with high monitoring costs.

2. Literature review and hypothesis development

2.1 The background of wrongful discharge laws

By the mid-1930s, employers and employees can legally terminate employment relationships without advance notice, penalty, or justification. This legal principle, known as employment-at-will, is widely adopted by U.S. state courts during that period. In the 1970s, wrongful discharge laws emerge to protect employees from unfair dismissals, as the longstanding legal consensus supporting at-will employment begins to erode (Morriss, 1994; Autor, Kerr, and Kugler, 2007). These laws commonly take three forms: the good-faith exception, the implied-contract exception, and the public-policy exception.

The implied-contract exception bars employers from terminating an employee without "good cause" when they have implicitly provided assurances of continued employment. The public-policy exception prohibits dismissals based on employees' exercise of statutory rights, such as attending jury duty, whistle-blowing, or refusing to commit perjury. The good-faith exception restricts employers from discharging employees for unjust causes, including dismissals aimed at avoiding the payment of commissions or pension benefits. By the end of the 1990s, 41 U.S. states adopt the implied-contract exception, 43 states adopt the public-policy exception, and 11 states adopt the good-faith exception. Following the enactment of these laws, managers became more likely to assert employment-related le-

gal rights. Dertouzos, Holland, and Ebener (1988) document that 53% of plaintiffs in wrongful discharge cases held executive or managerial positions.

Among the three wrongful discharge doctrines, the implied-contract exception is most directly related to managerial job security. As noted by Autor, Kerr, and Kugler (2007), the good-faith and public-policy exceptions are limited in scope and rarely litigated. In contrast, the implied-contract exception places the burden of proof on employers to justify dismissal for "good cause," thereby imposing greater constraints on termination decisions. Supporting this distinction, Schanzenbach (2003) finds consistent effects on job tenure only in states that adopted the implied-contract exception.

Second, unlike the pure at-will agreements typically applied to rank-and-file employees, managerial contracts often include both explicit and implicit terms. Although explicit contracts offer greater legal clarity and lower litigation risk, many firms are reluctant to provide them to executives before the 2000s. As Gillan, Hartzell, and Parrino (2009) report, fewer than half of S&P 500 CEOs have explicit contracts at the time, largely because such agreements tend to strengthen the executive's bargaining position rather than protect the firm. To avoid potential legal liabilities, firms often rely on implicit contracts, which, despite being unenforceable in court, help reduce the likelihood of litigation (Bull, 1987).

Finally, in the early stages of the law's implementation, courts generally required formal proof that the employee provides consideration (e.g., foregoing other opportunities or accepting additional responsibilities) in exchange for the employer's promise of continued employment. However, later cases show that courts become increasingly willing to recognize implied contractual rights even in the absence of such formalities. For instance, they consider explicit employer statements, indirect assurances, and the broader context of the employment relationship as sufficient evidence (Dertouzos, Holland, and Ebener, 1988). This evolution lower the evidentiary burden, making it more feasible for managers to invoke the implied-contract exception to safeguard their employment rights.

2.2 Motives for diversification

The literature identifies three primary explanations for corporate diversification: market power, the resource-based view, and agency theory. The market power perspective views diversification as a strategy driven by anti-competitive motives, such as cross-subsidization across markets to support predatory pricing, tacit coordination with multi-market rivals, and reciprocal arrangements with dual-role trading partners (i.e., firms that act as both suppliers and customers) (Montgomery, 1985; Bernheim and Whinston, 1990; Villalonga, 2000). The resource-based view argues that firms with excess resources and capabilities pursue diversification to deploy these assets across multiple businesses, thereby achieving operational economies of scope and generating additional returns (Teece, 1982; Wernerfelt, 1984; Barney, 2001; Matsusaka, 2001). Agency theory is widely used to explain value-destroying diversification. A substantial body of research finds that many diversification strategies pursued in the 1980s eroded firm value, and that subsequent refocusing efforts are largely driven by strengthened external governance mechanisms (see, among others, Shleifer and Vishny, 1991; Kaplan and Weisbach, 1992; Davis, Diekmann, and Tinsley, 1994; Comment and Jarrell, 1995; Denis, Denis, and Sarin, 1997; Bethel, Liebeskind, and Opler, 1998).

Several studies identify managerial employment risk as a motive for corporate diversification. For instance, Amihud and Lev (1981) argue that poor firm performance can threaten managers' current employment and future career, yet such risk cannot be diversified away in their personal portfolios because human capital is non-tradable. To reduce this undiversifiable risk, managers may pursue firm-level diversification, which stabilizes income streams and lowers the likelihood of bankruptcy. Although shareholders can also benefit from reduced firm risk, they can diversify more efficiently through personal investment portfolios tailored to their risk preferences. As a result, diversification motivated by managerial employment risk may reflect an agency conflict, as the associated risk reduction primarily benefits managers rather than shareholders.

Shleifer and Vishny (1989) propose an alternative view of managerial entrenchment

that emphasizes employment risk. Managers entrench themselves by expanding into new business areas that specifically depend on their own human capital. This incentive for diversification is particularly strong when a firm underperforms relative to its industry peers, or during periods of industry disruption when managerial skills become less valuable. By increasing the firm's reliance on their unique expertise, managers can reduce their vulnerability in existing operations and enhance their indispensability. However, such diversification is more likely to reduce shareholder value. For instance, managers who conduct unrelated-diversifying acquisitions are willing to overpay for their investments, leading to a lower market value following a bid announcement (Roll, 1986; Lang, Stulz, and Walkling, 1989).

Lewellen, Loderer, and Rosenfeld (1989) find no evidence that managers engage in M&As to reduce risk, and risk-reducing mergers do not appear to negatively affect stock returns. In contrast, May (1995) shows that managers with a high degree of human capital tied to their firms are more likely to pursue diversification, and those with specialized knowledge in their firm's existing technology tend to acquire targets with similar technologies. These findings provide support for the entrenchment-based explanation of corporate diversification.

Motivated by the notion that managers pursue diversification to protect their employment, we hypothesize that the incentive to entrench via diversification diminishes when job security increases. Specifically, the adoption of the implied-contract exception raises the cost of managerial dismissal, thereby enhancing job security and reducing the level of diversification.

Hypothesis 1. *Firms experiencing the adoption of wrongful discharge laws tend to reduce their level of diversification.*

The empire building theory, developed by Jensen and Meckling (1976) and Jensen (1986), suggests that managers have incentives to overinvest to pursue private benefits, even at the expense of shareholder value. In the absence of profitable investment options, excess cash flows can be inefficiently deployed by managers seeking to maximize private

benefits rather than shareholder value. As a result, managers seek diversification to pursue greater compensation, power, and prestige(see, among others, Stulz, 1990; Jensen and Murphy, 1990; Lang, Stulz, and Walkling, 1991; Aggarwal and Samwick, 2003).

Building on the empire-building explanation for corporate diversification, we hypothesize that managers are more likely to pursue higher levels of diversification when job security increases. Specifically, the implied-contract exception raises the cost of managerial dismissal and limits employers' ability to discipline managers through termination, thereby creating stronger incentives to expand through diversification.

Hypothesis 2. *Firms experiencing the adoption of wrongful discharge laws tend to increase their level of diversification.*

2.3 Diversification and firm value

The effect of corporate diversification on firm performance has been extensively debated in the literature. A substantial body of research finds that diversification reduces firm value, whereas refocusing strategies tend to enhance it (see, for example, Lang and Stulz, 1994; Berger and Ofek, 1995; Servaes, 1996; Lamont and Polk, 2002; Comment and Jarrell, 1995; John and Ofek, 1995; Daley, Mehrotra, and Sivakumar, 1997; Berger and Ofek, 1999). However, other studies contend that diversification does not inherently destroy value, as poor performance often precedes the diversification decision (Hubbard and Palia, 1999; Matsusaka, 2001; Campa and Kedia, 2002; Graham, Lemmon, and Wolf, 2002; Mansi and Reeb, 2002; Villalonga, 2004). Whether refocusing decisions induced by increased managerial job security improve firm value can depend on the relative costs and benefits of diversification.

From the benefit perspective, diversified firms operate business segments with imperfectly correlated cash flows, allowing internal capital markets to generate a coinsurance effect that enhances debt capacity. The resulting increase in debt capacity yields tax benefits and contributes to higher firm value (Lewellen, 1971). In addition, corporate headquarters in diversified firms typically have better information than external investors

regarding the investment opportunities of individual segments. This informational advantage improves the efficiency of internal capital reallocation across divisions (Gertner, Scharfstein, and Stein, 1994; Stein, 1997; Matsusaka and Nanda, 2002). Diversification also alleviates information asymmetry and lowers systematic risk, thereby improving access to external finance (Hadlock, Ryngaert, and Thomas, 2001; Hann, Ogneva, and Ozbas, 2013). This financing benefit becomes particularly valuable during periods of financial crisis or heightened market frictions, as access to external capital becomes restricted and internal funding sources play a more critical role (Almeida, Kim, and Kim, 2015; Kuppuswamy and Villalonga, 2016; Matvos, Seru, and Silva, 2018).

From the cost perspective, if diversification is driven by agency problems, internal capital markets enable managers to extract private benefits by reallocating resources inefficiently (Jensen, 1986). A number of studies attribute the value discount of diversified firms to capital misallocation, where inefficient internal capital markets lead to underinvestment in segments with strong investment opportunities (Rajan, Servaes, and Zingales, 2000; Scharfstein and Stein, 2000). Berger and Ofek (1995), Scharfstein (1998), and Ozbas and Scharfstein (2010) find that diversified firms invest more heavily than focused firms, but disproportionately allocate more capital to segments with low Tobin's Q and less to those with high Tobin's Q. These distortions are more pronounced in firms with severe agency problems. Lamont (1997) documents that, following the 1986 oil price collapse, diversified oil companies reduce investment in non-oil segments to subsidize their oil businesses. Similarly, Shin and Stulz (1998) show that, within diversified firms, investment-cash flow sensitivity in non-core segments does not reflect the segments' underlying investment opportunities, indicating inefficient allocation.

Scharfstein (1998) documents that, by the end of 1994, 33% of diversified firms refocused through the divestiture of their smallest segments, leading to more efficient internal capital allocation. Similarly, Gertner, Powers, and Scharfstein (2002) find that capital misallocation tends to decrease following a spin-off, as reflected in a greater investment sensitivity to Tobin's Q, particularly among unrelated diversified firms. Stock market reactions to spin-off announcements are generally positive, suggesting that in-

vestors perceive higher firm value in response to the dismantling of inefficient internal capital markets.

Hypothesis 3. *Following the adoption of wrongful discharge laws, business refocusing becomes more effective at enhancing firm value and improving internal capital allocation.*

3. Data and Methodology

We collect firm-level financial data for U.S. firms with common stocks listed on the NYSE, NASDAQ, and AMEX from the Compustat/CRSP Merged Database. Stock price information is obtained from the Center for Research in Security Prices (CRSP). We exclude financial (SIC codes 6000–6999) and utility firms (SIC codes 4900–4999) because they are subject to different regulatory environments.

Segment-level financial data are obtained from the Compustat Segment files. To measure firm diversification, we follow Matvos, Seru, and Silva (2018) and retain business segments with non-negative and non-missing values for assets, investment, or sales, excluding financial and utility segments. We then aggregate the segment data to the 2-digit SIC level for each firm. Institutional ownership data are sourced from Thomson Institutional (13f) Holdings. We use the Consumer Price Index from the Federal Reserve Economic Data (FRED) to convert all nominal values into year-2000 dollars. State-level GDP and population data are obtained from the Bureau of Economic Analysis and the U.S. Census Bureau, respectively.

We obtain the dates of state-level adoption of the good-faith, implied-contract, and public-policy exceptions to the employment-at-will doctrine from Autor, Kerr, and Kugler (2007), and use headquarter location data from Compustat to determine whether a firm is subject to wrongful-discharge laws. A data limitation is that Compustat reports only the current headquarters location, not historical locations. This measurement error likely biases our results toward finding no effect, as misclassification would attenuate the estimated impact of the laws on diversification.[2] Since the laws are adopted at different

[2] If firms are incorrectly coded as being subject to the legal shock (when they are not), the estimated

times across states, a firm can serve as both a treatment and control observation at different points in time. This variation helps mitigate concerns that unobserved firm-level heterogeneity between treatment and control groups drives the results (Serfling, 2016).

Our sample period spans from 1980 to 2002, beginning with the first year for which data from Thomson Institutional (13f) Holdings are available and ending five years after Louisiana's adoption of wrongful-discharge laws in 1998, the last such adoption among U.S. states. After applying the sample selection criteria and excluding observations with missing values for variables required in the baseline estimation yields a final sample of 48,396 firm-year observations.

To test whether an increase in managerial job security, arising from the adoption of the implied-contract exception, affects firm diversification decisions, we employ the following regression model:

$$\begin{aligned} Diversification_{i,s,t} = {} & \beta_0 + \beta_1 ImpliedContract_{s,t} + \beta_2 GoodFaith_{s,t} \\ & + \beta_3 PublicPolicy_{s,t} + \beta_4 Size_{i,s,t} + \beta_5 SalesGrowth_{i,s,t} \\ & + \beta_6 Q_{i,s,t} + \beta_7 ROA_{i,s,t} + \beta_8 Leverage_{i,s,t} + \beta_9 Cash_{i,s,t} \\ & + \beta_{10} StockReturn_{i,s,t} + \beta_{11} InstitutionalOwnership_{i,s,t} \\ & + \beta_{12} Age_{i,s,t} + \beta_{13} GDPperCapita)_{s,t} + \beta_{14} GDPGrowth_{s,t} \\ & + YearFEs + FirmFEs + \varepsilon_{i,s,t}, \end{aligned} \tag{1}$$

where subscripts i, s, and t denote firm, state, and year. The dependent variables in baseline regressions are $1 - HHI(assets)_{i,s,t}$ or $1 - HHI(sales)_{i,s,t}$, which are the proxies of diversification. $HHI(assets)_{i,t}$ is calculated as $\sum_{j \in J_{i,t}} \left(assets_{i,j,t} / \sum_{j \in J_{i,t}} assets_{i,j,t} \right)^2$, where $assets_{i,j,t}$ represents the asset of 2-digit SIC division j of firm i in year t, and $J_{i,t}$ is the set of 2-digit SIC divisions of firm i in year t. We construct the proxy of diversification as 1 minus $HHI(assets)_{i,s,t}$ so that higher values indicate a higher level of diversification. Following the same approach, we construct $1 - HHI(sales)_{i,s,t}$ using segment-level sales.

effect of the laws on diversification would be biased downward. Conversely, if firms that are subject to the shock are misclassified as untreated, we may fail to capture their responses to the policy change. In both cases, the bias works against finding a significant effect.

The explanatory variable of interest is $ImpliedContract_{s,t}$, which equals to one if a firm's headquarters are located in a state that has adopted the implied-contract exception in year t, and zero otherwise. We also control for the adoption of the remaining wrongful discharge exceptions by including $GoodFaith_{s,t}$ and $PublicPolicy_{s,t}$, which are dummy variables equal to one if the state where a firm is headquartered has adopted the good-faith or public-policy exception, respectively, in year t, and zero otherwise.

Following prior studies (Coles, Daniel, and Naveen, 2006; Gao, 2010; Gu, Wang, Yao, and Zhang, 2018; Matvos, Seru, and Silva, 2018), we control for a set of firm characteristics that are potential determinants of diversification. $Size_{i,t}$ is the natural logarithm of the book value of assets (in year-2000 dollars). $SalesGrowth_{i,t}$ denotes the annual growth rate of firm sales. $Q_{i,t}$ is Tobin's Q, measured as the ratio of market value to book value of assets. $ROA_{i,t}$ is return on assets, calculated as operating income before depreciation divided by the book value of assets. $Leverage_{i,t}$ is the book leverage ratio, measured as total debt over book value of assets. $Cash_{i,t}$ is the ratio of cash and cash equivalents to book assets. $StockReturn_{i,t}$ is the firm's annual stock return. $InstitutionalOwnership_{i,t}$ denotes the percentage of shares held by institutional investors. $Age_{i,t}$ is the natural logarithm of the number of years since the firm first appeared in Compustat. In addition, we include two state-level macroeconomic controls: $GDPperCapita_{s,t}$ and $GDPGrowth_{s,t}$, following Serfling (2016). $GDPperCapita_{s,t}$ is the natural logarithm of state GDP divided by total state population, and $GDPGrowth_{s,t}$ is the annual state-level GDP growth rate. Year fixed effects are included to account for time-specific shocks, and firm fixed effects control for unobserved time-invariant firm characteristics. As a result, β_1 can be interpreted as a DiD estimator that captures the effect of the implied-contract exception on firm diversification, comparing treated and untreated firms over time.

To investigate the effect of refocusing decisions, caused by a reduction in employment

concern, on firm value, we run the following equation:

$$\begin{aligned} DiversificationDiscount_{i,s,t} = \beta_0 &+ \beta_1 ImpliedContract_{s,t} + \beta_2 Refocusing_{i,s,t} \\ &+ \beta_3 ImpliedContract_{s,t} \times Refocusing_{i,s,t} \\ &+ \gamma' X_{i,s,t} + YearFEs + FirmFEs + \varepsilon_{i,s,t}. \end{aligned} \tag{2}$$

Following prior studies (see, for example, Berger and Ofek, 1995; Campa and Kedia, 2002; Kuppuswamy and Villalonga, 2016), we use $ExcessValue(AssetMultiplier)_{i,t}$ and $ExcessValue(SaleMultiplier)_{i,t}$ as proxies for the diversification discount. The main explanatory variable of interest is the interaction term $ImpliedContract_{s,t} \times Refocusing_{i,s,t}$, which captures the effect of refocusing decisions on firm value, conditional on the adoption of the implied-contract exception. $Refocusing_{i,s,t}$ is a dummy variable equal to one if a firm divests a segment operating in a 2-digit SIC industry different from that of its core business segment, and zero otherwise. The control variables are the same as those in Equation 1. Accordingly, β_3 measures whether the change in firm valuation following a refocusing decision differs under the adoption of the implied-contract exception.[3]

To examine changes in the efficiency of internal capital allocation in response to reduced managerial employment risk, we follow Rajan, Servaes, and Zingales (2000) and Hovakimian (2011) and estimate the following regression:

$$\begin{aligned} CapitalAllocation_{j,i,s,t} = \beta_0 &+ \beta_1 ImpliedContract_{s,t} + \beta_2 SegmentQ_{Hj,i,s,t} \\ &+ \beta_3 ImpliedContract_{s,t} \times SegmentQ_{Hj,i,s,t} \\ &+ \beta_4 SegmentSize_{j,i,s,t} + \beta_5 InverseQ_{j,i,s,t} + \beta_6 Diversity_{i,s,t} \\ &+ \gamma' X_{i,s,t} + YearFEs + FirmFEs + \varepsilon_{i,s,t}. \end{aligned} \tag{3}$$

We conduct the estimation at the segment-level for all diversified firms. The dependent variable is a proxy of inter-segment capital allocation. For each segment j, we calculate the proxy as the segment's industry-adjusted investment, minus the weighted average

[3] The purpose of this test is to examine whether the effect of refocusing on firm value differs depending on whether it is driven by reduced employment-related concerns, rather than to test whether refocused firms trade at a diversification premium.

of the same variable for all segments that belong to the same firm. The independent variable of interest is $ImpliedContract_{s,t} \times SegmentQ_{H\,j,i,s,t}$, captures the interaction of the DiD estimator with the segment-level investment opportunity. $SegmentQ_{H\,j,i,s,t}$ is a dummy variable that equals one if a segment's Q is greater than the weighted average segment Q within the firm, and zero otherwise. We follow Rajan, Servaes, and Zingales (2000) and include three segment-level variables that influence capital allocation: segment size ($SegmentSize_{j,i,s,t}$), the inverse of the segment's Q ratio ($InverseQ_{j,i,s,t}$), and the dispersion of investment opportunities within the firm ($Diversity_{i,s,t}$). Therefore, the coefficient β_3 captures whether segments with stronger investment opportunities receive more internal capital following the adoption of the implied-contract exception.

We report the summary statistics for all variables used in this study in Table 1, and the details of variable constructions are presented in Appendix A. The following section presents the results for the formal tests. In line with prior studies (Acharya, Baghai, and Subramanian, 2014; Serfling, 2016; Bai, Fairhurst, and Serfling, 2020), standard errors are adjusted for heteroskedasticity and clustered at the state level. As the adoption of wrongful discharge laws varies at the state level, clustering standard errors at the state level corrects the potential time-varying correlations in unobserved factors that affect different firms within a given state.

[Table 1 about here]

4. Empirical results

4.1 Implied-contract exception and firm diversification

Table 2 presents the baseline regression results from Equation 1. Columns 1 and 2 show that the adoption of the implied-contract exception is associated with a significant decline in firm diversification. Specifically, diversification decreases by approximately 9% and 8% relative to the sample means of $1 - HHI(assets)_{i,t}$ and $1 - HHI(sales)_{i,t}$, respectively.[4]

[4] The 9% estimate is calculated as $-0.009/0.105$, where -0.009 is the estimated coefficient on $ImpliedContract_{s,t}$ and 0.105 is the sample mean of $1 - HHI(assets)_{i,t}$. The 8% figure is computed

Mulherin and Boone (2000) document that both acquisitions and divestitures exhibit significant industry clustering. To account for this, we include industry-year fixed effects in Equation 1 to control for industry-specific shocks in a given year. Columns 3 and 4 show that the results remain qualitatively similar across both diversification measures, reinforcing the evidence that firms reduce diversification following the adoption of the implied-contract exception. Since standalone firms have a fixed diversification level of zero and cannot further reduce it, we re-estimate Equation 1 using only firms that are diversified at the beginning of the fiscal year (i.e., firms with at least two 2-digit SIC segments). Columns 5 and 6 indicate that the magnitude and statistical significance of the DiD estimator are even stronger within this subsample.

The results for the control variables are consistent with expectations. The positive coefficients on firm size and firm age, and the negative coefficient on Tobin's Q, support the view that firms in the decline stage may have exhausted growth opportunities in their core business and thus pursue diversification to seek new investment avenues (e.g., Lang and Stulz, 1994; Anand and Singh, 1997). The negative coefficients on leverage and institutional ownership suggest that firms with weaker governance tend to be more diversified, consistent with the agency view that managerial discretion facilitates inefficient diversification (e.g., Jensen, 1986; Jensen and Murphy, 1990). We find no significant effect of the good-faith or public-policy exceptions on diversification, suggesting that the job protection conferred by the implied-contract exception is more salient to managerial decision-making than other forms of wrongful discharge protection.[5]

To provide supporting evidence that the implied-contract exception enhances managerial job security, we examine its effect on CEO turnover outcomes. We regress CEO forced turnover and CEO tenure on the DiD estimator, controlling for variables from Campbell, Gallmeyer, Johnson, Rutherford, and Stanley (2011). We find that the adoption of the implied-contract exception is associated with a significantly lower probability of forced CEO turnover and significantly longer CEO tenure. These results support the

similarly using the mean of $1 - HHI(sales)_{i,t}$.

[5] We separately estimate the effects of the three wrongful discharge exceptions, as reported in Table IA1 of the Internet Appendix. The results are both qualitatively and quantitatively similar.

interpretation that the law strengthens managerial job security.[6]

Overall, our baseline results indicate that firms reduce their level of diversification following the adoption of the implied-contract exception. These findings support Hypothesis 1 and reject Hypothesis 2. Rather than increasing diversification to pursue private benefits, managers opt for a lower level of diversification when job security improves, consistent with the view that the implied-contract exception reduces entrenchment incentives.

[Table 2 about here]

4.2 Pre-trend analysis

A crucial assumption for the DiD estimation is whether the parallel time trends assumption is satisfied. The parallel assumption requires that the levels of diversification in the treatment and control groups follow a similar trend, prior to the adoption of the implied-contract exception. If the level of diversification in the treatment and control groups has already shown the pre-existing diverging trends before the shock, the DiD estimator will fail to capture the causal effect of shock on diversification.

Following Acharya, Baghai, and Subramanian (2014) and Serfling (2016), we begin by testing the parallel trends assumption through graphical analysis. We replace the DiD estimator in Equation 1 with a set of indicator variables for event time relative to the adoption year of the implied-contract exception. The last indicator equals one if the exception is adopted three or more years prior, and zero otherwise.[7] Figure 1

[6] The results are shown in Table IA2 of the Internet Appendix

[7] To construct the figures, we regress the following equation:

$$Diversification_{i,s,t} = \beta_0 + \sum_{\lambda=-5}^{3} \beta_\lambda ImpliedContract_{s,t}^{\lambda} + \gamma' X_{i,s,t} + YearFEs + FirmFEs + \varepsilon_{i,s,t},$$

where i, s, and t refer to firm, state, and year, respectively. The dependent variables are $1 - HHI(assets)_{i,s,t}$ or $1 - HHI(sales)_{i,s,t}$. $ImpliedContract_{s,t}^{\lambda}$ is a dummy variable indicating the year, relative to the adoption of the implied-contract exception. For example, $ImpliedContract_{s,t}^{-2}$ equals one if a firm will experience the adoption of the implied-contract exception two years later, and zero otherwise. $ImpliedContract_{s,t}^{2}$ equals one for the second year after the implied-contract exception in state, and zero otherwise. $ImpliedContract_{s,t}^{3}$ equals one if no less than three years after the adoption and

illustrates the dynamic effect of the implied-contract exception on firm diversification. The y-axis plots the estimated coefficients on the event-time indicators, and the x-axis represents years relative to the law's adoption. The left panel of Figure 1 shows that, when diversification is measured by $1-HHI(assets)$, the difference in the level of diversification between the treatment and control groups does not exhibit a remarkable change a few years before the adoption of the implied-contract exception, as the coefficients fluctuate around zero. However, the treatment group's level of diversification decreases significantly in the year after the enactment of the law. The right panel of Figure 1 shows a similar trend for $1 - HHI(sales)$.

[Figure 1 about here]

Table 3 presents the formal tests for the parallel assumption. In Panel A, we modify Equation 1 by adding $ImpliedContract_{t-1}$, $ImpliedContract_{t-2}$ and $ImpliedContract_{t-3}$, which equal one if a state adopts the implied-contract exception one, two, or three years after year t, respectively, and zero otherwise. Columns 1 and 2 show that the coefficient on the DiD estimator remains significantly negative for both proxies of diversification, consistent with the baseline results in Table 2. The coefficients on the lead indicators are statistically insignificant, suggesting no evidence of pre-trend violations. Columns 3 and 4 present results for the subsample of diversified firms, which are qualitatively similar.[8] Panel B presents a placebo test in which the policy adoption year is artificially set to two or three years before the actual implementation. The placebo DiD estimates are insignificant across all specifications, except when diversification is measured by $1-HHI(assets)$ and the placebo treatment is assigned two years prior to the actual adoption year.

Overall, the results in Table 3 and the graphical evidence in Figure 1 provide strong support for the parallel trends assumption. We find no evidence of diverging trends in diversification between the treatment and control groups prior to the adoption of the implied-contract exception.

zero otherwise. Control variables are identical to those in Equation 1. The left panel of Figure 1 shows β_λ in the regression above for $1 - HHI(assets)_{i,s,t}$, and the right panel is for $1 - HHI(sales)_{i,s,t}$.

[8] In Table IA3, we present results with industry-year fixed effects to account for time-varying industry shocks. The results remain robust to this specification.

[Table 3 about here]

4.3 Implied-contract exception and refocusing decisions

The results thus far indicate that firms exposed to the adoption of the implied-contract exception significantly reduce their level of diversification. This observed decline in firm scope may be achieved through divestitures, a reduction in diversifying expansions, or an increase in non-diversifying expansions.

One concern is that the reduced level of diversification may not be driven by weakened managerial entrenchment. It is possible that a manager can build an empire by pursuing non-diversified acquisitions. In this case, a reduced level of diversification may be the result of acquiring firms that belong to the industry in which the acquirer's "core" business operates, i.e., deeply diversified firms increase their related diversification. Alternatively, since diversification provides internal capital market that benefit of risk reduction, the reduction in diversification may reflect the decreased demand for the positively perceived outcomes of diversification, since higher employment costs could make businesses more reluctant to hire and less inclined to invest in diversified expansion. To distinguish among these potential explanations, we further examine how firms reduce diversification following the adoption of the implied-contract exception.

We first examine whether the reduction in diversification is driven by divestitures. To do so, we re-estimate Equation 1 using $Refocusing$ as the dependent variable, which is a dummy variable equals one if a firm drops a segment that operates in a different 2-digit SIC industry from its core business. A positive and significant DiD estimator suggests that firms affected by the legal change reduce diversification by actively eliminating business segments.

Panel A of Table 4 presents the effects of the implied-contract exception on firms' refocusing decisions. In Column 1, the significantly positive coefficient on the DiD estimator indicates that treated firms are more likely to divest segments following the law's adoption. Column 2 shows similar results after controlling for industry-year fixed effects. Column 3 restricts the sample to diversified firms; the coefficient has the expected sign

but is statistically insignificant. Columns 4 to 6 report parallel trends tests using the same methodology as in Table 3. Both the pre-trend and placebo tests provide no evidence of differential trends between the treatment and control groups prior to the adoption of the law. Overall, the evidence from Panel A of Table 4 indicates that firms affected by the adoption of the implied-contract exception reduce diversification through business segment divestitures.

We next examine the effect of the implied-contract exception on firms' M&A decisions. M&A data are obtained from Thomson SDC Deals.[9] Following Acharya, Amihud, and Litov (2011), Lin, Officer, and Shen (2018), and Ni and Yin (2018), we classify an M&A deal as diversifying if the acquirer and target operate in different 2-digit SIC industries, and as non-diversifying if they share the same 2-digit SIC code. Based on this classification, we construct two indicator variables, *DiversifyingM&A* and *Non-diversifyingM&A*, which equal one if a firm engages in a diversifying or non-diversifying M&A, respectively, in a given year. We then estimate the impact of the law's adoption on the likelihood of conducting each type of M&A. If the observed decline in diversification is driven by empire building through non-diversifying acquisitions or by a reduced demand for the benefits of diversification, we should observe an increase in the likelihood of engaging in diversifying M&A and a decrease in the likelihood of engaging in non-diversifying M&A following the law's adoption.

Panel B of Table 4 reports the estimation results. Columns 1 and 2 show that the coefficients on the DiD estimator are statistically insignificant for both the full sample and the diversified subsample, indicating that the adoption of the implied-contract exception does not significantly affect the likelihood of engaging in diversifying M&A. Similarly, Columns 3 and 4 show no significant effect on non-diversifying M&A activity. In Columns 5 and 6, we further restrict the sample to deals involving U.S. targets and find consistent results.[10]

[9] We restrict the sample to completed U.S. public firm deals with a transaction value of at least one million dollars. We require that the acquirer holds less than 50% ownership before the transaction and more than 50% after. Deal types include mergers, acquisitions, acquisitions of majority interests, and acquisitions of assets.

[10] In Table IA4 of the Internet Appendix, we conduct a robustness check using 3-digit SIC codes to

Overall, these findings suggest that firms reduce diversification primarily through divestitures, rather than through changes in M&A behavior driven by empire building or a diminished demand for diversification benefits.

[Table 4 about here]

4.4 Robustness and additional tests

4.4.1 Addressing entrenchment, monitoring, and investment opportunity biases

We conduct a series of robustness tests to validate our findings. First, to ensure that the results are not driven by pre-existing differences in managerial entrenchment between treated and control firms, we include the E-index ($EIndex$) as a control variable in our estimation. Following Elyasiani and Zhang (2015), we use the entrenchment index developed by Bebchuk, Cohen, and Ferrell (2009), which captures the degree of managerial entrenchment based on the presence of six governance provisions that weaken shareholder rights and protect management from external discipline.

It is also possible that the observed reduction in diversification reflects increased shareholder engagement and monitoring intensity. Long-term institutional investors, such as dedicated institutions and quasi-indexers, are typically associated with enhanced monitoring and a greater focus on long-term firm value (Gaspar, Massa, and Matos, 2005; Chen, Harford, and Li, 2007; Hartzell, Sun, and Titman, 2014). As a result, they may discourage excessive diversification motivated by managerial entrenchment or empire building, and instead promote more focused corporate strategies. To address this alternative explanation, we include the ownership shares of dedicated institutional investors ($DedicatedInvestor$) and quasi-indexers ($QuasiIndexers$), as classified by Bushee (1998, 2001), as additional control variables in our analysis.

Panel A of Table 5 presents robustness checks addressing alternative explanations. Columns 1 and 2 show that the coefficient on the DiD estimator remains statistically

classify M&A transactions. The results remain consistent.

significant for both diversification measures when controlling for the E-index. Columns 3 and 4 restrict the sample to diversified firms and yield similar results. Columns 5 and 6 report estimates controlling for long-term institutional ownership. The impact of the implied-contract exception remains negative and significant for both proxies of diversification, consistent with the baseline findings. Columns 7 and 8 show that the results remain robust for the sample of diversified firms.

Another concern is that the observed effect of the law's implementation may reflect variation in the demand for diversification across firms in different stages of the corporate life cycle. For instance, when the growth opportunities in the core industry are exhausted, which often occurs in the decline stage of a firm's life cycle, diversification may serve as an alternative channel for pursuing investment opportunities. Accordingly, the negative effect of the implied-contract exception can be driven by differences in the availability of investment opportunities rather than changes in managerial incentives. To test this possibility, we divide the sample based on whether a firm's Tobin's Q is above or below the annual median, and estimate the model separately for high- and low-opportunity firms. [11]

Panel B of Table 5 presents the corresponding results based on the Tobin's Q subsample split. Columns 1 and 2 show that the negative effect on $1 - HHI(assets)$ persists for both high- and low-opportunity firms. Columns 3 and 4 report similar findings within the subsample of diversified firms. In Columns 5 to 8, we repeat the analysis using $1 - HHI(sales)$ as the outcome variable and find qualitatively similar results across all subsamples.

[Table 5 about here]

4.4.2 Propensity score matching analysis

We also implement a propensity score matching (PSM) procedure to account for differences in firm characteristics between the treatment and control groups. Specifically,

[11] In Table IA5 of the Internet Appendix, we also perform the estimation using a split based on firm age. The results remain consistent.

we estimate a logit model using the control variables from Equation 1 to predict the likelihood that a firm belongs to the treatment group, and use the resulting predicted probability as the propensity score.

For each treated firm, we identify a matched control firm from the same 2-digit SIC industry and year, selecting the nearest neighbor within a 1% caliper of the propensity score, with replacement. The propensity score is calculated based on firm characteristics in the year prior to the adoption of the law.

After the matching procedure, we identify 758 treated firms and 331 matched control firms. To isolate the effect of the law's enactment, the sample is restricted to observations within a three-year window before and after the adoption of the implied-contract exception, with a minimum of one year of data surrounding the shock. Panel A of Table 6 presents the results of the balance test on firm characteristics. The difference-in-means for the matching variables between the treatment and control groups is statistically insignificant in all cases except for ROA, indicating that our matching has effectively mitigated most of the observed differences of firm characteristics between the two groups.

We next conduct a DiD analysis using the matched sample. Specifically, we repeat the baseline estimation and test the parallel trends assumption, with results presented in Panel B of Table 6. Columns 1 and 2 report estimates that are consistent with those in Table 2, while Columns 3 to 8 show no evidence for the violation of parallel trends assumption prior to the adoption of the implied-contract exception. [12] Overall, using a propensity score matching procedure and a DiD analysis in relation to the adoption of the implied-contract exception, we find robust evidence for Hypothesis 1.

[Table 6 about here]

4.4.3 Stacked difference-in-differences analysis

In addition to the robustness tests discussed above, we implement a stacked DiD analysis. Previous studies highlight concerns about comparing newly-treated units to

[12] In Table IA6, we use the matched sample to examine the effect of the law's enactment and assess the parallel trends assumption for the refocusing decision. The results remain consistent.

previously-treated units in multi-period DiD settings (Cengiz, Dube, Lindner, and Zipperer, 2019; Goodman-Bacon, 2021; Baker, Larcker, and Wang, 2022). To address potential heterogeneity in treatment effects and ensure a "clean" control group, we adopt a stacked DiD framework. Specifically, in the first step, based on the year of each state's law implementation, we select only those control groups that never experience a closure. In the second step, we construct each cohort by retaining treated and control firms with non-missing values for variables three years before and after each event. Finally, we stack observations for each cohort into a single dataset to conduct the DiD estimation.

Table 7 presents the results of the stacked DiD analysis. Column 1 confirms that the enactment of the implied-contract exception is associated with a reduction in treated firms' diversification levels. Column 2 shows that this effect persists when restricting the sample to firms that are diversified prior to the shock. The insignificant coefficients on the pre-treatment indicators in Columns 3 and 4 suggest that the parallel trends assumption holds, indicating that the estimated effects are unlikely to be driven by differential pre-trends in diversification between treated and control firms. Overall, the stacked DiD results are consistent with our baseline findings and provide additional support for the robustness of the estimated treatment effect.

[Table 7 about here]

4.5 Mechanisms of the adoption of the implied-contract exception on firm diversification

We argue that the passage of the implied-contract exception enhances managerial job security, thereby reducing managers' incentives to pursue diversification as a tool of entrenchment. Shleifer and Vishny (1989) argue that managers are incentivized to increase the value of their human capital through diversification, meaning that managers possessing lower firm-specific human capital have a higher incentive to hedge against employment risk through firm diversification, because replacing them with outside candidates is less costly.

Firstly, Parrino (1997) documents that firms operating in homogeneous industries face a higher likelihood of CEO turnover, including forced turnover and outside succession. Similarly, Gillan, Hartzell, and Parrino (2009) find that firms in homogeneous industries are more likely to incur lower costs when terminating an implicit contract, as they can draw from a broader pool of CEO candidates. If the implementation of the implied-contract exception indeed leads to lower levels of diversification by enhancing managerial job security, then we would expect the law's impact on diversification to be more pronounced in industries characterized by greater industry homogeneity.

To construct the industry homogeneity index, we first calculate an equally weighted industry return for each two-digit SIC industry based on firms' monthly returns from CRSP. For each firm, we then regress monthly stock returns on both the equally weighted market return index and the equally weighted industry return index, using a three-year rolling window. The partial correlation coefficient on the industry return index from these regressions is averaged across firms within each industry-year to derive the industry homogeneity index. We then define a binary indicator for highly homogeneous industries, which equals one if an industry's homogeneity index is above the median in a given year, and zero otherwise. To examine whether the adoption of the implied-contract exception has a stronger effect on firms in more homogeneous industries, where CEO turnover and outside succession are more likely, we include the interaction between this indicator and the DiD estimator in Equation 1.

Secondly, we examine the role of managerial incentive structures in shaping the impact of the law's enactment on diversification. CEOs with high fixed salaries and without clawback provisions are more likely to engage in diversification for entrenchment purposes. In contrast, incentive-based compensation contracts, particularly those that tie executive pay to long-term stock performance, help align the interests of managers and shareholders and thereby constrain managerial entrenchment (Lewellen, Loderer, and Martin, 1987; Hall and Liebman, 1998; Zhou, 2001; Hu and Kumar, 2004).

If the adoption of the law reduces managers' incentives to entrench through diversification, we expect the effect to be more pronounced for firms with weaker incentive

alignment. To test this prediction, we collect data from BoardEx and follow Hu and Kumar (2004) to construct the proportion of stock-based executive compensation. Based on this measure, we create a binary indicator that equals one if a firm's stock-based compensation falls below the annual median, and include an interaction term between this indicator and the DiD estimator in our regressions. Similarly, we construct a dummy variable equal to one if a firm's E-index exceeds the annual median. A higher E-index reflects greater managerial entrenchment and lower governance quality. We include the interaction between this indicator and the DiD estimator to examine whether the law's effect on diversification is stronger among firms with higher levels of entrenchment.

Columns 1 and 2 of Table 8 show that, following the adoption of the implied-contract exception, firms in highly homogeneous industries experience a greater reduction in diversification compared to those in less homogeneous industries, across both diversification measures. Columns 3 and 4 provide additional evidence that the law's impact is more pronounced among firms with lower levels of stock-based compensation. In Columns 5 and 6, the coefficients on the interaction terms with the high E-index indicator are negative, although they are statistically significant only when diversification is measured by $1 - HHI(sales)$.[13]

Additionally, we test an alternative explanation that the reduction in diversification may reflect firms' diminished incentive to pursue the risk-reducing benefits of diversification following the law's adoption.[14] The adoption of the implied-contract exception may reduce the perceived benefits of diversification, thereby discouraging firms from investing in expansion and leading to less diversification. To examine this prediction, we use the measure of capital reallocation prospects from Matvos, Seru, and Silva (2018) as a proxy for diversification benefits. Specifically, this measure captures the extent to which capital reallocation across divisions is more productive when divisions have less correlated cash flows, since lower correlation enables firms to smooth internal funding more effectively. We incorporate this variable, along with its interaction with the DiD estima-

[13] In Table IA7 of the Internet Appendix, we repeat the analysis using a subsample of diversified firms and find consistent results.

[14] The results are in Table IA8 of the Internet Appendix.

tor ($ImpliedContract$), into Equation 1. The insignificant coefficients on the interaction term do not support the view that the impact of the implied-contract exception on firms' diversification strategies is due to the reduced perceived diversification benefits.[15]

Taken together, the findings in Table 8 support the interpretation that the adoption of the implied-contract exception reduces managerial employment risk, thereby diminishing the incentive to pursue diversification for entrenchment purposes.

[Table 8 about here]

4.6 Implied-contract exception, diversification and firm value

Thus far, we have shown that the adoption of the implied-contract exception mitigates managerial entrenchment, resulting in lower levels of diversification. To further examine this interpretation, we investigate whether such refocusing efforts lead to improvements in firm value. If managerial diversification driven by job security concerns represents an agency cost that diminishes firm value, then a decline in such entrenchment incentives should lead to refocusing decisions that enhance firm value and benefit shareholders.

We begin by comparing the value of divested segments before and after the passage of the law. If post-law divestitures involve segments with lower value than those divested prior to the law, this would be consistent with divestment driven by reduced managerial entrenchment. In contrast, the absence of a significant difference in the value of divested segments would suggest that refocusing is instead motivated by a diminished need for risk mitigation. Since the value of a segment is not directly observable, we employ imputed values in our estimation. Specifically, we construct a proxy for segment value, denoted as $ImputedValue(AssetMultiplier)$, by multiplying the segment's assets by the median market value-to-asset ratio of single-segment firms in the same industry. Similarly, we construct an alternative proxy, $ImputedValue(SaleMultiplier)$, using segment sales and the median market value-to-sales ratio of single-segment firms in the same industry.

[15] We also examine the role of employment costs in shaping the effect of the law's adoption on firm diversification. The results are reported in Table IA9 in the Internet Appendix, suggesting that employment costs do not explain the negative impact of the law's adoption on firm diversification

Columns 1 and 2 of Table 9 report the corresponding results. The coefficients on the DiD estimator are negative and statistically significant for both proxies of segment value. These findings suggest that segments divested after the law's implementation tend to have lower value, which is consistent with the managerial entrenchment explanation. Additionally, we follow Matvos, Seru, and Silva (2018) to construct a measurement for diversification benefits using the time-series correlation in industry-level cash flow-to-assets ratios between a firm's divested segment and its remaining business segments. If firms refocus due to a reduced need for the perceived diversification benefit of risk reduction, we expect divested segments to exhibit a low correlation. However, we find no evidence that segments divested after the law's adoption have significantly lower cash flow correlation, which does not support the interpretation that refocusing is driven by a reduced demand for diversification benefits.[16]

Next, we test whether refocusing decisions following the adoption of the law are associated with higher firm value, using Equation 2. Column 3 of Table 9 presents a statistically significant and positive coefficient (0.030) on the interaction between $ImpliedContract$ and $Refocusing$, indicating that refocusing after the enactment of the implied-contract exception is associated with a 3.05 percent increase in $ExcessValue(AssetMultiplier)$, relative to refocusing decisions made prior to the law.[17] Consistent with this result, Column 4 reports a positive and significant effect on $ExcessValue(SaleMultiplier)$, suggesting that post-law refocusing is associated with an 8.76 percent increase in excess value compared to pre-law refocusing.[18] We further examine whether this value effect holds within the subsample of diversified firms. Column 5 and Column 6 show that the interac-

[16] The results are in Table IA8 of the Internet Appendix.

[17] Because the dependent variable is the natural log of the market-to-imputed-value ratio, the interaction coefficient of 0.03 corresponds to a 3.05% increase in that ratio ($e^{0.03} - 1 \approx 3.05\%$). For a representative firm with an imputed value of \$1 billion and an average pre-interaction value of $ExcessValue(AssetMultiplier) = 0.034$ (i.e., a ratio of $e^{0.034} = 1.0346\%$), the implied dollar gain is $0.0305 \times \$1.0346$ billion $\approx \$31.5$ million. Thus, refocusing in an implied-contract state adds roughly \$30 million in market value for the average firm in our sample.

[18] The interaction coefficient of 0.084 corresponds to an 8.76% increase ($e^{0.084} - 1 \approx 8.76\%$). For a representative firm with an imputed value of \$1 billion and an average pre-interaction value of $ExcessValue(AssetMultiplier) = -0.026$ (i.e., a ratio of $e^{-0.026} = 0.974\%$), the implied dollar gain is $0.0876 \times \$0.974$ billion $\approx \$85.3$ million.

tion term remains positive, although it is statistically significant only when excess value is measured using the sales multiplier. Overall, the results in Table 9 provide support for Hypothesis 3, suggesting that refocusing following the adoption of the law is associated with improvements in firm value. This finding is consistent with the interpretation that refocusing, driven by reduced managerial entrenchment, contributes to enhanced value creation for shareholders.

[Table 9 about here]

4.7 Implied-contract exception, diversification and capital allocation efficiency

We next examine the source of the firm value increase associated with the reduction in diversification following the enactment of the implied-contract exception. Table 10 reports the results on capital allocation efficiency after the law's implementation.

Column 1 presents estimations based on the model developed by Rajan, Servaes, and Zingales (2000). The positive and statistically significant coefficient on the DiD estimator indicates that intra-segment capital allocation increases following the enactment of the law. This result suggests that capital allocation across segments becomes more active after the law's passage, consistent with improved internal capital markets in refocused firms.

In Column 2, we examine how heterogeneity in investment opportunities influences firms' capital allocation responses to the law's adoption. A higher value of $Diversity$ indicates greater dissimilarity among a firm's segments. As noted by Rajan, Servaes, and Zingales (2000), in the absence of effective governance, underperforming segments may attract capital at the expense of segments with more promising opportunities, leading to inefficient internal capital allocation. To test this mechanism, we construct a dummy variable, $Diversity_H$, which equals one if a firm's $Diversity$ is above the median value in a given year. We then interact $Diversity_H$ with the DiD estimator to capture whether the law's effect on capital allocation is more pronounced for firms with greater segment

heterogeneity.

The results show that the coefficients on the interaction terms are positive and statistically significant, indicating that firms with greater potential for internal capital misallocation are more likely to adjust their capital allocation following the law's adoption. However, these findings do not directly indicate whether such reallocation is more efficient. The interpretation that the law alleviates agency problems holds only if capital is redirected toward segments with higher investment opportunities. Conversely, reallocating capital from high- to low-opportunity segments would support a strengthened empire building and contradict the view that the law reduces managerial entrenchment.

To further validate the interpretation that the observed effect reflects a reduction in agency problems, we follow Hovakimian (2011) and examine whether firms allocate more capital to segments with higher investment opportunities after the law's adoption. Column 3 reports a positive coefficient on the interaction between the DiD estimator and $SegmentQ_H$, indicating that treated firms reallocate more capital toward high-opportunity segments.[19] This finding is consistent with improved capital allocation efficiency following the reduction in managerial entrenchment. In addition, we further examine the moderating role of incentive compensation contracts. Column 4 shows that the improvement in capital allocation is more pronounced among firms with low stock-based compensation, providing additional evidence consistent with a reduction in agency conflicts following the law's adoption.[20]

Overall, the results in Table 10 provide supporting evidence that diversified firms improve their capital allocation efficiency, as the implied-contract exception reduces managers' incentives to engage in diversification as an entrenchment strategy against employment risk.

[19] More specifically, given that the mean value of segment total assets in our sample is \$78.33 million ($\approx e^{4.361}$ million), the coefficient of 0.003 implies a dollar effect of approximately \$0.235 million on an average segment ($0.003 \times \$78.33$ million). If a typical multi-segment firm has five segments, this scales to roughly \$1.18 million more in capital expenditures allocated to its high-Q segments when operating under the implied-contract exception.

[20] In Table IA10 of the Internet Appendix, we report the estimation results with additional control variables included in Equation 1. The results remain consistent.

[Table 10 about here]

5. Conclusion

Using a staggered DiD approach and the enactment of wrongful discharge laws as a quasi-natural experiment, this study finds that firms reduce their level of diversification following the introduction of legal protections for managerial employment. The findings suggest that, between managerial entrenchment and empire building theories, hedging against employment risk is a more likely driver of diversification decisions. The results are robust to alternative measures of diversification, parallel trends testing, propensity score matching, and the stacked DiD approach.

We also show that firms tend to refocus through divestitures, rather than by increasing non-diversifying M&A or reducing diversifying M&A. This finding alleviates concerns that the observed effect is driven by managers seeking private benefits through non-diversified acquisitions or by a reduced demand for the perceived benefits of diversification. Furthermore, we find that the effect of this legal enforcement on diversification is more pronounced among firms with high industry homogeneity, high E-index scores, and low stock-based compensation—settings in which managerial entrenchment incentives are more severe. These findings are consistent with the view that the enactment of the implied-contract exemption reduces diversification by alleviating managerial entrenchment.

We further examine whether de-diversification driven by improved managerial job security can enhance firm value. Consistent with the agency theory explanation of corporate diversification, we find that firms engaging in refocusing after the enactment of the implied-contract exception experience an increase in firm value. This value enhancement appears to be linked to improved capital allocation efficiency across divisions, as firms allocate resources more effectively following the law's adoption.

This study offers a deeper understanding of the motivations behind diversification decisions. From a policy perspective, legal protections that strengthen managerial job

security may facilitate more efficient capital allocation across firms. This study offers stakeholders an alternative approach to mitigating value-destroying diversification driven by agency problems: firms may consider enhancing managerial job security as a substitute for costly monitoring, particularly when oversight costs are high.

Appendix A. Variable definition

Age is defined as the natural logarithm of the number of years since the firm first appears in the Compustat database.

CapitalAllocation is calculated as

$$\frac{capx_{j,i,t}}{assets_{j,i,t}} - \left(\frac{capx_{j,i,t}}{assets_{j,i,t}}\right)^{ind} - \sum_{j \in J_{i,t}} w_{j,i,t} \left(\frac{capx_{j,i,t}}{assets_{j,i,t}} - \left(\frac{capx_{j,i,t}}{assets_{j,i,t}}\right)^{ind}\right)$$

where $assets_{j,i,t}$ is the asset of 2-digit SIC division j of firm i in year t (Compustat segment item: IAS), $capex_{j,i,t}$ is the capital expenditure of 2-digit SIC division j of firm i in year t (Compustat segment item: CAPXS), and $w_{j,i,t}$ is segment j's proportion in the firm's beginning-of-period total assets. The superscript ind indicates that the variable is the asset-weighted average of the variable in the same industry as segment j, and $J_{i,t}$ is the set of 2-digit SIC divisions of firm i in year t. Segments with missing or negative values for capital expenditures, identifiable assets, or net sales are excluded.

Cash is defined as the ratio of cash and cash equivalents (Compustat item: CHE) to the book value of total assets (Compustat item: AT). Observations with missing values are excluded.

DedicatedInvestor is the sum of the percentage of shares held by dedicated institutional investors. Missing values are imputed with zero. The identification of dedicated institutional investors is available at: https://accounting-faculty.wharton.upenn.edu/bushee/.

DiversifyingM&A is a dummy variable equal to one if a firm acquires a target from a different 2-digit SIC industry in a given year, and zero otherwise.

DiversifyingM&A w/US is a dummy variable equal to one if a firm acquires a U.S. target from a different 2-digit SIC industry in a given year, and zero otherwise.

Diversity is defined as the standard deviation of a firm's asset-weighted segment Q, divided by the equally weighted average segment Q.

EIndex is the E-index that measures firm-level entrenchment. It is constructed

based on the sum of six governance provisions that limit shareholder rights and entrench management, including the provisions of staggered boards, limits to shareholder by law amendments, poison pills, golden parachutes, and super majority requirements for mergers and charter amendments. Observations with missing values are excluded. The data is available at: https://lucianbebchuk.com/data.shtml.

$ExcessValue(AssetMultiplier)$ is defined as the natural logarithm of the ratio of a firm's market value to its imputed value. Market value is calculated as the sum of the market value of equity and the book value of debt. The imputed value is the sum of the segment-level imputed values, where each segment's value is obtained by multiplying its assets by the median market value-to-assets ratio of single-segment firms in the same industry. Segments with missing or negative values for capital expenditures, identifiable assets, or net sales are excluded from the calculation.

$ExcessValue(SaleMultiplier)$ is defined as the natural logarithm of the ratio of a firm's market value to its imputed value. Market value is calculated as the sum of the market value of equity and the book value of debt. The imputed value is the sum of the segment-level imputed values, where each segment's value is obtained by multiplying its assets by the median market value-to-sales ratio of single-segment firms in the same industry. Segments with missing or negative values for capital expenditures, identifiable assets, or net sales are excluded from the calculation.

$GDPperCapita$ is the natural logarithm of annual GDP of a state divided by the total state population.

$GDPGrowth$ is the annual state-level GDP growth rate.

$GoodFaith$ is a dummy variable that equals one if a firm's headquarters is located in a state that has adopted the good-faith exception in a given year, and zero otherwise.

$HHI(assets)$ is calculated as $\sum_{j\in J_{i,t}} \left(assets_{i,j,t}/\sum_{j\in J_{i,t}} assets_{i,j,t}\right)^2$, where $assets_{i,j,t}$ represents total assets of 2-digit SIC division j of firm i in year t (Compustat segment item: IAS), and $J_{i,t}$ is the set of 2-digit SIC divisions of firm i in year t. We exclude segments with missing or negative values of capital expenditures, identifiable assets and net sales.

$HHI(sales)$ is calculated as $\sum_{j \in J_{i,t}} \left(sales_{i,j,t} / \sum_{j \in J_{i,t}} sales_{i,j,t} \right)^2$, where $sales_{i,j,t}$ represents sales of 2-digit SIC division j of firm i in year t (Compustat segment item: SALES), and $J_{i,t}$ is the set of 2-digit SIC divisions of firm i in year t. We exclude segments with missing or negative values of capital expenditures, identifiable assets and net sales.

$ImpliedContract$ is a dummy variable equals one if a firm's headquarter belongs to a state that has adopted the implied-contract exception in a given year, and zero otherwise.

$ImputedValue(AssetMultiplier)$ is a segment's imputed value, obtained by multiplying the segment's assets with the median of the market value-to-assets ratio computed using only single-business firms in the same industry. We exclude segments with missing or negative values of capital expenditures, identifiable assets and net sales.

$ImputedValue(SaleMultiplier)$ is a segment's imputed value, obtained by multiplying the segment's sales with the median of the market value-to-sales ratio computed using only single-business firms in the same industry. We exclude segments with missing or negative values of capital expenditures, identifiable assets and net sales. Observations with missing values are excluded.

$IndustryHomogeneity$ is estimated as the following three steps. First, we calculate an equally weighted industry return index for each 2-digit sic industries using firms' monthly return in the CRSP. Second, we regress monthly stock return on the equally weighted market return index and the equally weighted industry return index for each firm using 3-year rolling window method. Third, the average of the partial correlation coefficient for the industry return index in the regression for each industry and year is the industry homogeneity index. Observations with missing values are excluded.

$InstitutionalOwnership$ is defined as the percentage of ownership held by institutional investors. Observations with missing values are imputed with zero.

$InverseQ$ is the inverse of a segment' Q. A segment' Q is calculated as the weighted average Tobin's Q of all single-segment firms with the same industry. Observations with missing values are excluded.

$Leverage$ is book leverage ratio measured by total debt (Compustat item: DLC+DLTT) over book value of assets. Observations with missing values are excluded.

$Non-diversifyingM\&A$ is a dummy variable that equals one if a firm acquires a target from a different 2-digit SIC industry, and zero otherwise.

Non-diversifyingM&A w/US is a dummy variable that equals one if a firm acquires a U.S. target from a different 2-digit SIC industry, and zero otherwise.

PublicPolicy is a dummy variable equals one if a firm's headquarter belongs to a state that has adopted the public-contract exception in a given year, and zero otherwise.

Q is market value of assets (Compustat item: CSHO $\times$ PRCC_F + AT $-$ CEQ) over book value of assets. Observations with missing values are excluded.

QuasiIndexer is the sum of the percentage of shares held by quasi-indexer institutional investors. The identification of quasi-indexer institutional investors is available at: https://accounting-faculty.wharton.upenn.edu/bushee/. Missing values are imputed with zero.

$Refocusing$ is a dummy variable equals one if a firm has lower number of 2-digit SIC segments than previous year, and zero otherwise.

ROA is return on asset calculated as operating income before depreciation (Compustat item: OIBDP) divided by book value of assets. Observations with missing values are excluded.

SalesGrowth is the annual growth rate of firm sales (Compustat item: SALE). Observations with missing values are excluded.

SegmentSize is the natural logarithm of segment total assets adjusted to year-2000 dollars. Observations with missing values are excluded.

Size is the natural logarithm of book value of assets (Compustat item: AT) adjusted to year-2000 dollars. Observations with missing values are excluded.

StockCompensation is defined as the proportion of stock-based compensation to total compensation. Stock-based compensation includes the value of stock options and restricted stock awards. Observations with missing values are excluded.

StockReturn is the annual return over the fiscal year. Observations with missing values are excluded.

Appendix B. Supplementary data

Supplementary results related to this article can be found in the Internet Appendix.

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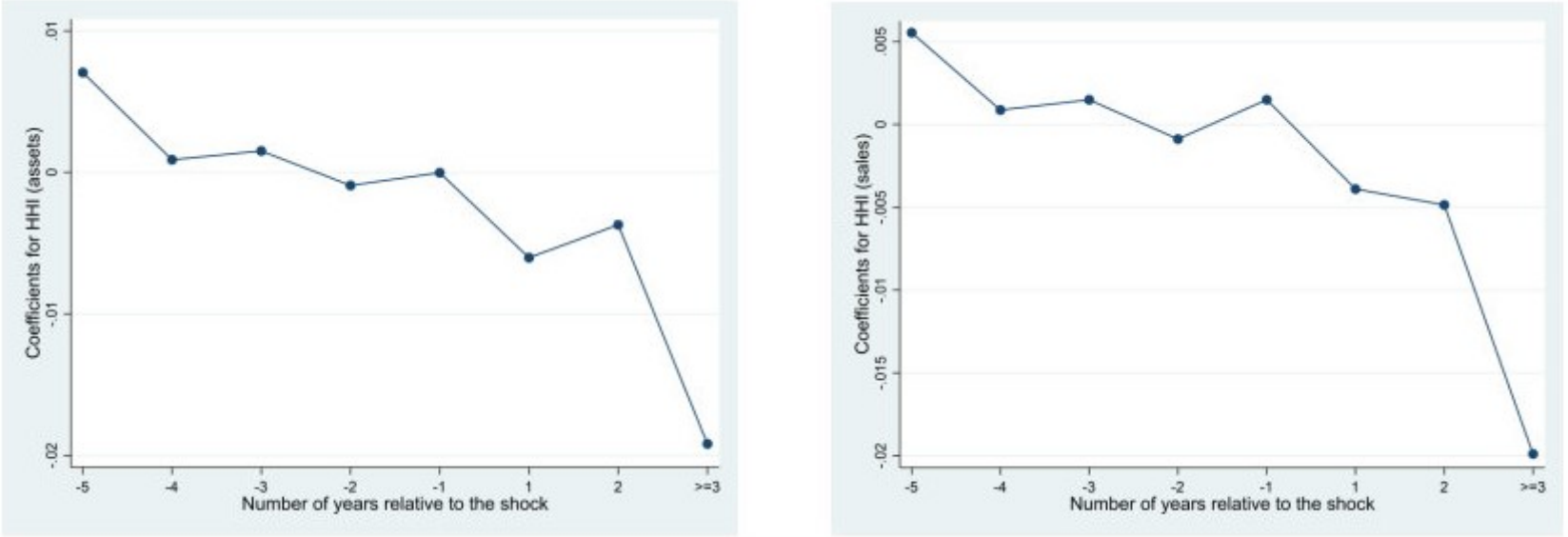
Figure 1

Pre-trend analysis



The figures show the geographic results for the parallel assumption. To construct the figures, we regress the following equation:

$$Diversification_{i,s,t} = \beta_0 + \sum_{\lambda=-5}^{3} \beta_\lambda ImpliedContract^{\lambda}_{s,t} + \gamma' X_{i,s,t} + YearFEs + FirmFE + \varepsilon_{i,s,t},$$

where i, s, and t refer to firm, state, and year, respectively. The dependent variables are $1 - HHI(assets)_{i,s,t}$ or $1 - HHI(sales)_{i,s,t}$. $ImpliedContract^{\lambda}_{s,t}$ is a dummy variable indicating the year, relative to the adoption of the implied-contract exception. For example, $ImpliedContract^{-2}_{s,t}$ equals one if a firm will experience the adoption of the implied-contract exception two years later, and zero otherwise. $ImpliedContract^{2}_{s,t}$ equals one for the second year after the implied-contract exception in state, and zero otherwise. $ImpliedContract^{3}_{s,t}$ equals one if no less than three years after the adoption and zero otherwise. Control variables are identical to those in Equation 1. The left panel of Figure 1 shows β_λ in the regression above for $1 - HHI(assets)_{i,s,t}$, and the right panel is for $1 - HHI(sales)_{i,s,t}$. The y-axis in the graph denotes the coefficients on each dummy variable, and the x-axis denotes the time relative to the year of adoption of the implied-contract exception.

Table 1
Summary statistics

This table shows the descriptive statistics for the variables used in this study. Columns (1)-(6) report number of observations, mean, standard deviation, 25^{th} percentile, median and 75^{th} percentile for each variable. All continuous variables are winsorized at their 1^{st} and 99^{th} percentiles. Detailed variable definitions are in Appendix A.

	N.	Mean	S.D.	P25	Median	P75
	(1)	(2)	(3)	(4)	(5)	(6)
Panel A: Firm-level variables						
$1 - HHI(assets)$	48,396	0.105	0.196	0	0	0.099
$1 - HHI(sales)$	48,396	0.104	0.193	0	0	0.095
$ImpliedContract$	48,396	0.757	0.429	1	1	1
$PublicPolicy$	48,396	0.765	0.424	1	1	1
$GoodFaith$	48,396	0.246	0.431	0	0	0
$Size$	48,396	5.319	1.868	3.998	5.157	6.519
$SalesGrowth$	48,396	0.248	0.733	0.009	0.110	0.267
Q	48,396	1.953	2.060	1.076	1.402	2.075
ROA	48,396	0.112	0.178	0.077	0.136	0.191
$Leverage$	48,396	0.228	0.202	0.057	0.200	0.343
$Cash$	48,396	0.148	0.186	0.020	0.069	0.202
$StockReturn$	48,396	0.185	0.619	−0.193	0.080	0.401
Age	48,396	2.635	0.735	2.079	2.639	3.258
$InstitutionalOwnership$	48,396	10.335	11.268	0	7.450	15.439
DiversifyingM&A	48,396	0.115	0.318	0	0	0
Non-diversifyingM&A	48,396	0.094	0.292	0	0	0
DiversifyingM&A w/US	48,396	0.099	0.298	0	0	0
Non-diversifyingM&A w/US	48,396	0.081	0.274	0	0	0
$EIndex$	3728	2.340	1.359	1	2	3
$DedicatedInvestor$	48,396	0.066	0.090	0	0.022	0.106
$QuasiIndexer$	48,396	0.133	0.150	0	0.079	0.230
$StockCompensation$	9027	0.375	0.299	0.051	0.365	0.616
$ExcessValue(AssetMultiplier)$	45,493	0.034	0.612	−0.359	−0.020	0.365
$ExcessValue(SaleMultiplier)$	45,364	−0.026	0.918	−0.581	−0.092	0.417
$Refocusing$	48,396	0.034	0.182	0	0	0
Panel B: Industry-level variables						
$IndustryHomogeneity$	48,348	0.873	0.159	0.776	0.896	0.976
Panel C: Segment-level variables						
$ImputedValue(AssetMultiplier)$	3180	4.586	2.279	3.040	4.687	6.161
$ImputedValue(SaleMultiplier)$	3180	4.730	2.313	3.181	4.839	6.303
$CapitalAllocation$	36,678	0.002	0.082	−0.026	−0.001	0.021
$Diversity$	36,678	0.321	0.210	0.160	0.277	0.448
$InverseQ$	36,678	2.089	6.563	0.581	0.735	0.929
$SegmentSize$	36,678	4.361	2.087	2.952	4.382	5.824
Panel D: State-level variables						
$GDPperCapita$	48,396	9.792	0.164	9.689	9.799	9.898
$GDPGrowth$	48,396	0.032	0.032	0.012	0.031	0.053

Table 2
Baseline results

This table presents the baseline results from the estimation of Equation 1. Columns (1)-(4) report results based on the full sample, and columns (5) and (6) report result based on the diversified sample only. *ImpliedContract* equals one if a firm's headquarter belongs to a state that has adopted the implied-contract exception in a given year, and zero otherwise. *PublicPolicy*(*GoodFaith*) is a dummy variable that equals one if a state in which a firm is headquartered has adopted the good-faith exception (public-policy exception) in a given year, and zero otherwise. *Size* is the natural logarithm of book value of assets adjusted to year-2000 dollars. *SalesGrowth* is the growth rate of firm sales. *Q* is Tobin's *Q* calculated as market value of assets over book value of assets. *ROA* is return on asset measured by operating income before depreciation over book value of assets. *Leverage* is book leverage ratio measured by total debt over book value of assets. *Cash* is cash and cash equivalents over book value of assets. *StockReturn* is annual return over the past fiscal year. *InstitutionalOwnership* is the percentage of ownership held by institutional investors. *Age* is the natural logarithm of the number of years since the firm's record first appears in Compustat. *GDPperCapita* is the natural logarithm of annual GDP of a state divided by the total state population. *GDPGrowth* is the annual state-level GDP growth rate. All standard errors in parentheses are adjusted for heteroscedasticity and clustered at state-level. All continuous variables are winsorized at their 1^{st} and 99^{th} percentiles. *, ** and *** indicate significance at the 10%, 5% and 1% level, respectively. Detailed variable definitions are in Appendix A.

	Full sample	Full sample	Full sample	Full sample	Diversified sample	Diversified sample
	$1-HHI(assets)$	$1-HHI(sales)$	$1-HHI(assets)$	$1-HHI(sales)$	$1-HHI(assets)$	$1-HHI(sales)$
	(1)	(2)	(3)	(4)	(5)	(6)
ImpliedContract	−0.009**	−0.008**	−0.009**	−0.009**	−0.016***	−0.020***
	(0.004)	(0.004)	(0.004)	(0.004)	(0.005)	(0.005)
PublicPolicy	−0.004	−0.003	−0.005	−0.004	−0.005	0.002
	(0.005)	(0.004)	(0.005)	(0.004)	(0.007)	(0.006)
GoodFaith	0.006	−0.001	0.013	0.002	0.010	−0.004
	(0.016)	(0.018)	(0.016)	(0.018)	(0.023)	(0.023)
Size	0.023***	0.024***	0.024***	0.025***	0.033***	0.039***
	(0.002)	(0.003)	(0.002)	(0.003)	(0.005)	(0.005)
SalesGrowth	0.003***	0.003**	0.003***	0.003***	0.027***	0.022***
	(0.001)	(0.001)	(0.001)	(0.001)	(0.006)	(0.006)
Q	−0.001***	−0.001**	−0.001**	−0.001**	−0.003	−0.005*
	(0.000)	(0.000)	(0.000)	(0.000)	(0.002)	(0.003)
ROA	−0.015**	−0.016***	−0.015**	−0.016***	0.058	0.021
	(0.006)	(0.006)	(0.006)	(0.005)	(0.041)	(0.036)
Leverage	−0.012	−0.003	−0.009	0.001	−0.077***	−0.049***
	(0.007)	(0.007)	(0.009)	(0.008)	(0.017)	(0.017)
Cash	−0.051***	−0.051***	−0.050***	−0.050***	−0.096***	−0.103***
	(0.010)	(0.010)	(0.009)	(0.009)	(0.027)	(0.025)
StockReturn	0.001	0.001*	0.001	0.001**	−0.005	−0.001
	(0.001)	(0.001)	(0.001)	(0.001)	(0.003)	(0.002)
InstitutionalOwnership	−0.000**	−0.000**	−0.000***	−0.000***	0.000	0.000
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
Age	0.037***	0.034***	0.032***	0.030***	−0.053**	−0.045*
	(0.006)	(0.006)	(0.005)	(0.006)	(0.022)	(0.024)
GDPperCapita	−0.035	−0.034	−0.043	−0.045	−0.129***	−0.125***
	(0.023)	(0.027)	(0.028)	(0.028)	(0.037)	(0.037)
GDPGrowth	0.007	0.020	0.003	0.023	0.062	0.116**
	(0.023)	(0.026)	(0.026)	(0.026)	(0.044)	(0.044)
Firm FE	Yes	Yes	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	No	No	Yes	Yes
Industry-year FE	No	No	Yes	Yes	No	No
Adj. R^2	0.748	0.752	0.750	0.755	0.583	0.596
N	48,396	48,396	48,396	48,396	12,837	12,837

Table 3
Tests for the parallel assumption

This table reports the parallel assumption tests for the difference-in-differences analysis. In Panel A, $ImpliedContract_{t-1}$, $ImpliedContract_{t-2}$ and $ImpliedContract_{t-3}$ are included in Equation 1, which are dummy variables that equal one if a state will pass the law three years later, two years later and one year later, respectively, and zero otherwise. Panel B reports the placebo test that the shock time is falsely defined two years ahead ($Placebo(-2)$) and three years ahead ($Placebo(-3)$). Control variables are identical to those in Equation 1. All standard errors in parentheses are adjusted for heteroscedasticity and clustered at state-level. All continuous variables are winsorized at their 1^{st} and 99^{th} percentiles. *, ** and *** indicate significance at the 10%, 5% and 1% level, respectively. Detailed variable definitions are in Appendix A.

Panel A: Pre-trend analysis				
	Full sample	Full sample	Diversified sample	Diversified sample
	$1-HHI(assets)$	$1-HHI(sales)$	$1-HHI(assets)$	$1-HHI(sales)$
	(1)	(2)	(3)	(4)
$ImpliedContract_{t-3}$	−0.001	−0.001	0.004	0.003
	(0.006)	(0.005)	(0.010)	(0.008)
$ImpliedContract_{t-2}$	−0.004	−0.006	−0.001	−0.008
	(0.005)	(0.004)	(0.006)	(0.005)
$ImpliedContract_{t-1}$	−0.005	−0.005	−0.007	−0.008
	(0.005)	(0.005)	(0.007)	(0.006)
$ImpliedContract_{t}$	−0.010**	−0.010**	−0.018***	−0.024***
	(0.004)	(0.004)	(0.007)	(0.006)
Control variables	Yes	Yes	Yes	Yes
Firm FE	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes
Adj. R^2	0.747	0.751	0.583	0.596
N	48,396	48,396	12,837	12,837
Panel B: Placebo test				
	Full sample	Full sample	Full sample	Full sample
	$1-HHI(assets)$	$1-HHI(sales)$	$1-HHI(assets)$	$1-HHI(sales)$
	(1)	(2)	(4)	(5)
$Placebo(-2)$	−0.008*	−0.006		
	(0.004)	(0.004)		
$Placebo(-3)$			−0.009	−0.005
			(0.006)	(0.007)
Control variables	Yes	Yes	Yes	Yes
Firm FE	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes
Adj. R^2	0.747	0.751	0.747	0.751
N	48,396	48,396	48,396	48,396

Table 4
Implied-contract exception and refocusing decisions

This table presents the results for refocusing decision. In Panel A, the dependent variable is *Refocusing* that equals one if a firm has fewer number of 2-digit SIC segments than previous year, and zero otherwise. Columns (1)-(3) are corresponding to the baseline regression in Table 2, and columns (4)-(6) are corresponding to the parallel assumption test in Table 3. In columns (1) and (2) of Panel B, the dependent variable is *DiversifyingM&A*, which equals one if a firm acquires a target in a different 2-digit SIC industry, and zero otherwise. In columns (3) and (4), the dependent variable is *Non-diversifyingM&A*, which equals one if the acquirer and target belong to the same 2-digit SIC industry, and zero otherwise. In columns (5) and (6), the dependent variables are constructed in the same way as those in columns (1) and (3), respectively, but are restricted to M&A deals involving U.S. target firms only. Control variables are identical to those in Equation 1. All standard errors in parentheses are adjusted for heteroscedasticity and clustered at state-level. All continuous variables are winsorized at their 1^{st} and 99^{th} percentiles. *, ** and *** indicate significance at the 10%, 5% and 1% level, respectively. Detailed variable definitions are in Appendix A.

Panel A: Refocusing decisions						
	Full sample	Full sample	Diversified sample	Full sample	Full sample	Full sample
	Refocusing	*Refocusing*	*Refocusing*	*Refocusing*	*Refocusing*	*Refocusing*
	(1)	(2)	(3)	(4)	(5)	(6)
$ImpliedContract_{t-3}$				0.001		
				(0.009)		
$ImpliedContract_{t-2}$				−0.002		
				(0.008)		
$ImpliedContract_{t-1}$				0.001		
				(0.011)		
$ImpliedContract_{t}$	0.010**	0.011***	0.013	0.010*		
	(0.004)	(0.004)	(0.011)	(0.006)		
$Placebo(-2)$					0.007	
					(0.005)	
$Placebo(-3)$						0.002
						(0.006)
Control variables	Yes	Yes	Yes	Yes	Yes	Yes
Firm FE	Yes	Yes	Yes	Yes	Yes	Yes
Year FE	Yes	No	Yes	Yes	Yes	Yes
Industry-Year FE	No	Yes	No	No	No	No
Adj. R^2	0.015	0.021	0.084	0.015	0.015	0.015
N	48,396	48,396	12,837	48,396	48,396	48,396
Panel B: M&A decisions						
	Full sample	Diversified sample	Full sample	Diversified sample	Full sample	Full sample
	DiversifyingM&A	*DiversifyingM&A*	*Non-diversifyingM&A*	*Non-diversifyingM&A*	*DiversifyingM&A w/US*	*Non-diversifyingM&A w/US*
	(1)	(2)	(3)	(4)	(5)	(6)
ImpliedContract	−0.005	−0.008	0.000	0.001	−0.003	−0.003
	(0.006)	(0.007)	(0.006)	(0.013)	(0.006)	(0.005)
Control variables	Yes	Yes	Yes	Yes	Yes	Yes
Firm FE	Yes	Yes	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes	Yes	Yes
Adj. R^2	0.260	0.226	0.204	0.235	0.241	0.180
N	48,396	12,837	48,396	12,837	48,396	48,396

Table 5
Addressing entrenchment, monitoring, and investment opportunity biases

This table presents robustness checks for the baseline results. Panel A includes additional control variables. Panel B splits the sample based on Tobin's Q: firms with a Tobin's Q above the median in a given year are classified as high-growth firms, and those below the median as low-growth firms. The dependent variables in Panel A are $1 - HHI(assets)$ (columns 1,3,5,7) and $1 - HHI(sales)$ (columns 2,4,6,8). Panel B examines $1 - HHI(assets)$ (columns 1-4) and $1 - HHI(sales)$ (columns 5-8) for high and low growth firms. $EIndex$ is E-index constructed based on the provisions of staggered boards, limits to shareholder by law amendments, poison pills, golden parachutes, and super majority requirements for mergers and charter amendments. $DedicatedInvestor$ and $QuasiIndexer$ are the percentages of shares held by dedicated institutional investors and quasi-indexer institutional investors, respectively. Control variables are identical to those in Equation 1. All standard errors in parentheses are adjusted for heteroscedasticity and clustered at state-level. All continuous variables are winsorized at their 1^{st} and 99^{th} percentiles. ***, **, and * indicate significance at the 1%, 5%, and 10% levels, respectively. Detailed variable definitions are in Appendix A.

Panel A: Additional control variables								
	Full sample	Full sample	Diversified sample	Diversified sample	Full sample	Full sample	Diversified sample	Diversified sample
	$1 - HHI(assets)$	$1 - HHI(sales)$	$1 - HHI(assets)$	$1 - HHI(sales)$	$1 - HHI(assets)$	$1 - HHI(sales)$	$1 - HHI(assets)$	$1 - HHI(sales)$
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
$ImpliedContract$	−0.387***	−0.326***	−0.288***	−0.261***	−0.056***	−0.086***	−0.016***	−0.020***
	(0.009)	(0.010)	(0.016)	(0.019)	(0.002)	(0.002)	(0.005)	(0.005)
$EIndex$	−0.006	−0.003	−0.021	−0.013				
	(0.005)	(0.005)	(0.012)	(0.010)				
$DedicatedInvestor$					−0.053***	−0.053***	−0.049	−0.050
					(0.015)	(0.014)	(0.039)	(0.039)
$QuasiIndexer$					−0.033***	−0.023**	−0.021	0.004
					(0.009)	(0.009)	(0.024)	(0.023)
Control variables	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Firm FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Adj. R^2	0.729	0.742	0.611	0.622	0.748	0.752	0.583	0.596
N	3728	3728	1291	1291	48,396	48,396	12,837	12,837
Panel B: High and low growth firms								
	High growth firms	Low growth firms	High growth firms (Diversified sample)	Low growth firms (Diversified sample)	High growth firms	Low growth firms	High growth firms (Diversified sample)	Low growth firms (Diversified sample)
	$1 - HHI(assets)$	$1 - HHI(assets)$	$1 - HHI(assets)$	$1 - HHI(assets)$	$1 - HHI(sales)$	$1 - HHI(sales)$	$1 - HHI(sales)$	$1 - HHI(sales)$
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
$ImpliedContract$	−0.011**	−0.013**	−0.020**	−0.021***	−0.009**	−0.014**	−0.024**	−0.024*
	(0.004)	(0.006)	(0.009)	(0.010)	(0.004)	(0.006)	(0.009)	(0.013)
Control variables	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Firm FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Adj. R^2	0.770	0.758	0.693	0.687	0.782	0.757	0.717	0.679
N	24,199	24,197	6415	6422	24,199	24,197	6415	6422

Table 6
Difference-in-differences with propensity score matching

This table presents the results for the difference-in-difference with propensity score matching technique. Columns (1) and (2) of Panel A report the mean of each variable for teat and matched control groups, respectively. Column (3) reports the p-value for the difference-in-means between columns (1) and (2). Panel B reports the baseline results and parallel assumption test using the matched sample. Control variables are identical to those in Equation 1. All standard errors in parentheses are adjusted for heteroscedasticity and clustered at state-level. All continuous variables are winsorized at their 1^{st} and 99^{th} percentiles. *, ** and *** indicate significance at the 10%, 5% and 1% level, respectively. Detailed variable definitions are in Appendix A.

Panel A: Balance test-PSM			
	Treat	Control	p-value for difference-in-means
	(1)	(2)	(3)
Size	5.360	5.426	0.583
SalesGrowth	0.118	0.127	0.651
Q	1.564	1.669	0.260
ROA	0.132	0.151	0.005
Leverage	0.237	0.228	0.459
Cash	0.113	0.115	0.774
StockReturn	0.332	0.345	0.726
Age	2.754	2.751	0.949
InstitutionalOwnership	5.948	6.882	0.128
N. of firms	758	331	

Panel B: Difference-in-differences, pre-trend analysis and placebo test-PSM								
	$1-HHI(assets)$	$1-HHI(sales)$	$1-HHI(assets)$	$1-HHI(sales)$	$1-HHI(assets)$	$1-HHI(sales)$	$1-HHI(assets)$	$1-HHI(sales)$
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
$ImpliedContract_{t-3}$			−0.000	−0.006				
			(0.007)	(0.006)				
$ImpliedContract_{t-2}$			−0.004	−0.007				
			(0.006)	(0.005)				
$ImpliedContract_{t-1}$			0.000	−0.002				
			(0.003)	(0.004)				
$ImpliedContract_{t}$	−0.010**	−0.007*	−0.011**	−0.008**				
	(0.004)	(0.003)	(0.005)	(0.003)				
$Placebo(-2)$					−0.006	0.001		
					(0.004)	(0.004)		
$Placebo(-3)$							−0.004	0.004
							(0.007)	(0.005)
Control variables	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Firm FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Adj. R^2	0.825	0.83	0.825	0.829	0.825	0.829	0.825	0.829
N	7802	7802	7802	7802	7802	7802	7802	7802

Table 7
Stacked difference-in-differences

This table presents the results for the stacked difference-in-difference analysis. The dependent variables in all columns are $1 - HHI(assets)$. Columns (1) and (2) report the results for full and diversified samples, respectively. Columns (3) and (4) report the parallel assumption test. All standard errors in parentheses are adjusted for heteroscedasticity and clustered at state-level. All continuous variables are winsorized at their 1^{st} and 99^{th} percentiles. *, ** and *** indicate significance at the 10%, 5% and 1% level, respectively. Detailed variable definitions are in Appendix A.

	Full sample	Diversified sample	Full sample	Diversified sample
	(1)	(2)	(3)	(4)
$ImpliedContract_{t-3}$			−0.004	−0.007
			(0.002)	(0.001)
$ImpliedContract_{t-2}$			−0.004	−0.006
			(0.003)	(0.002)
$ImpliedContract_{t-1}$			−0.003	−0.006
			(0.003)	(0.006)
$ImpliedContract_{t}$	−0.006*	−0.011**	−0.007**	−0.012*
	(0.003)	(0.005)	−0.003	−0.006
$PublicPolicy$	−0.001	−0.005	−0.001	−0.005
	(0.004)	(0.006)	(0.003)	(0.006)
$GoodFaith$	−0.003	−0.002	−0.003	−0.002
	(0.010)	(0.017)	(0.010)	(0.017)
$Size$	0.028***	0.038***	0.028***	0.038***
	(0.003)	(0.008)	(0.003)	(0.008)
$SalesGrowth$	0.007***	0.033***	0.007***	0.033***
	(0.002)	(0.009)	(0.002)	(0.009)
Q	−0.002**	−0.005	−0.002**	−0.005
	(0.001)	(0.004)	(0.001)	(0.004)
ROA	−0.014	0.03	−0.014	0.03
	(0.009)	(0.048)	(0.009)	(0.048)
$Leverage$	−0.017	−0.060***	−0.017	−0.060***
	(0.012)	(0.020)	(0.012)	(0.020)
$Cash$	−0.069***	−0.090***	−0.069***	−0.090***
	(0.011)	(0.026)	(0.011)	(0.026)
$StockReturn$	0.004**	−0.002	0.004**	−0.002
	(0.001)	(0.004)	(0.001)	(0.004)
$InstitutionalOwnership$	−0.000**	−0.000	−0.000**	−0.000
	(0.000)	(0.000)	(0.000)	(0.000)
Age	0.045***	−0.045	0.045***	−0.045
	(0.012)	(0.037)	(0.012)	(0.037)
$GDPperCapita$	−0.079***	−0.160***	−0.078***	−0.160***
	(0.023)	(0.033)	(0.023)	(0.032)
$GDPGrowth$	0.03	0.084	0.029	0.082
	(0.021)	(0.060)	(0.022)	(0.062)
Firm FE	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes
Cohort FE	Yes	Yes	Yes	Yes
Adj. R^2	0.836	0.678	0.836	0.678
N	80624	26109	80624	26109

Table 8
Implied-contract exception, firm diversification and entrenchment incentives

This table presents the cross-sectional tests of the effect of the implied-contract exception on diversification. $IndustryHomogeneity_H$, $StockCompensation_L$, and $EIndex_H$ are dummy variables that equal one if the industry homogeneity index is above the median, stock-based compensation is below the median, and the E-index is above the median, respectively. Control variables are identical to those in Equation 1. All standard errors in parentheses are adjusted for heteroscedasticity and clustered at state-level. All continuous variables are winsorized at their 1^{st} and 99^{th} percentiles. ***, **, * indicate significance at 1%, 5%, 10% levels. Detailed variable definitions are in Appendix A.

	$1-HHI(assets)$	$1-HHI(sales)$	$1-HHI(assets)$	$1-HHI(sales)$	$1-HHI(assets)$	$1-HHI(sales)$
	(1)	(2)	(3)	(4)	(5)	(6)
$ImpliedContract$	−0.006	−0.006	−0.309***	−0.231***	−0.379***	−0.241***
	(0.004)	(0.004)	(0.009)	(0.010)	(0.022)	(0.015)
$ImpliedContract \times IndustryHomogeneity_H$	−0.008***	−0.007**				
	(0.003)	(0.003)				
$IndustryHomogeneity_H$	0.008***	0.007**				
	(0.003)	(0.003)				
$ImpliedContract \times StockCompensation_L$			−0.010**	−0.009*		
			(0.005)	(0.005)		
$StockCompensation_L$			0.007**	0.009**		
			(0.003)	(0.004)		
$ImpliedContract \times EIndex_H$					−0.028	−0.030**
					(0.021)	(0.015)
$EIndex_H$					0.020	0.023**
					(0.018)	(0.010)
Control variables	Yes	Yes	Yes	Yes	Yes	Yes
Firm FE	Yes	Yes	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes	Yes	Yes
Adj. R^2	0.747	0.751	0.801	0.811	0.732	0.740
N	48,348	48,348	9027	9027	3728	3728

Table 9
Implied-contract exception, refocusing decision and excess value

This table reports estimation results for imputed value and excess value. Columns (1) and (2) report results based on the sample of divested segments. Columns (3) and (4) report results based on the full sample, and columns (5) and (6) report results based on the diversified sample. $ImputedValue(AssetMultiplier)$ is calculated as the natural logarithm of a segment's assets multiplied by the median market-to-book ratio. $ExcessValue(AssetMultiplier)$ is defined as the natural logarithm of the ratio of a firm's market value to its imputed value. $ImputedValue(SaleMultiplier)$ and $ExcessValue(SaleMultiplier)$ are calculated in the same way but using the sale multiplier. $Refocusing$ is a dummy variable that equals one if a firm conducts refocusing decisions, and zero otherwise. Control variables are identical to those in Equation 1. All standard errors in parentheses are adjusted for heteroscedasticity and clustered at state-level. All continuous variables are winsorized at their 1^{st} and 99^{th} percentiles. *, ** and *** indicate significance at the 10%, 5% and 1% level, respectively. Detailed variable definitions are in Appendix A.

	Divested Segment Sample		Full sample		Diversified sample	
	$ImputedValue$ $(AssetMultiplier)$	$ImputedValue$ $(SaleMultiplier)$	$ExcessValue$ $(AssetMultiplier)$	$ExcessValue$ $(SaleMultiplier)$	$ExcessValue$ $(AssetMultiplier)$	$ExcessValue$ $(SaleMultiplier)$
	(1)	(2)	(3)	(4)	(5)	(6)
$ImpliedContract$	−0.237**	−0.224*	−0.012	−0.021	0.014	0.012
	(0.091)	(0.120)	(0.018)	(0.028)	(0.016)	(0.023)
$Refocusing$			−0.000	−0.009	−0.003	−0.013
			(0.010)	(0.011)	(0.014)	(0.016)
$ImpliedContract \times Refocusing$			0.030***	0.084***	0.018	0.087***
			(0.011)	(0.014)	(0.011)	(0.016)
Control variables	Yes	Yes	Yes	Yes	Yes	Yes
Firm FE	Yes	Yes	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes	Yes	Yes
Adj. R^2	0.784	0.735	0.723	0.750	0.739	0.715
N	3180	3180	45,493	47,867	10,256	12,520

Table 10
Implied-contract exception and capital allocation efficiency

This table presents the baseline results from the estimation of Equation 3. The dependent variable is *CapitalAllocation* in each regression. $Diversity_H$ is a dummy variable that equals one if the firm's *Diversity* is higher than the median in a given year, and zero otherwise. $SegmentQ_H$ is a dummy variable that equals one if a segment's Q is greater than the firm's weighted average segment Q, and zero otherwise. $StockCompensation_L$ is a dummy variable that equals one if the firm's *StockCompensation* is below the median in a given year, and zero otherwise. *SegmentSize* is the natural logarithm of segment assets adjusted to year-2000 dollars. *Diversity* is the dispersion of investment opportunities within a firm. *InverseQ* is the inverse of a segment' Q. All standard errors in parentheses are adjusted for heteroscedasticity and clustered at state-level. All continuous variables are winsorized at their 1^{st} and 99^{th} percentiles. *, ** and *** indicate significance at the 10%, 5% and 1% level, respectively. Detailed variable definitions are in Appendix A.

	CapitalAllocation	*CapitalAllocation*	*CapitalAllocation*	*CapitalAllocation*
	(1)	(2)	(3)	(4)
ImpliedContract	0.004**	0.006***	0.002	−0.006
	(0.001)	(0.002)	(0.002)	(0.006)
$ImpliedContract \times Diversity_H$		0.005**		
		(0.002)		
$Diversity_H$		−0.004*		
		(0.002)		
$ImpliedContract \times SegmentQ_H$			0.003*	−0.004
			(0.002)	(0.003)
$SegmentQ_H$			−0.006***	−0.001
			(0.002)	(0.003)
$ImpliedContract \times SegmentQ_H \times StockCompensation_L$				0.017***
				(0.006)
$ImpliedContract \times StockCompensation_L$				−0.012***
				(0.004)
$SegmentQ_H \times StockCompensation_L$				−0.021***
				(0.005)
$StockCompensation_L$				0.012***
				(0.004)
SegmentSize	−0.001	−0.001	−0.001	−0.004**
	(0.001)	(0.001)	(0.001)	(0.002)
Diversity	0.019***	0.018***	0.020***	0.030***
	(0.006)	(0.007)	(0.006)	(0.009)
InverseQ	0.000	−0.000	−0.000**	0.000
	(0.000)	(0.000)	(0.000)	(0.001)
Segment FE	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes
Adj. R^2	0.337	0.342	0.337	0.453
N	36,678	36,678	36,678	6988

Internet Appendix

Managerial job security and firm diversification

(Not for Publication)

Table IA1
The individual effects of wrongful discharge laws: Implied-contract, public-policy, and good-faith

This table presents the estimation results separately for each of the three wrongful discharge laws. The second row shows the dependent variables in each regression. Columns (1)-(3) report results based on the full sample, and columns (4)-(6) report results based on the diversified sample only. All standard errors in parentheses are adjusted for heteroscedasticity and clustered at the state level. All continuous variables are winsorized at their 1^{st} and 99^{th} percentiles. *, ** and *** indicate significance at the 10%, 5% and 1% level, respectively. Detailed variable definitions are in Appendix A.

	Full sample	Full sample	Full sample	Diversified sample	Diversified sample	Diversified sample
	$1-HHI(assets)$	$1-HHI(assets)$	$1-HHI(assets)$	$1-HHI(assets)$	$1-HHI(assets)$	$1-HHI(assets)$
	(1)	(2)	(3)	(4)	(5)	(6)
ImpliedContract	−0.009**			−0.017***		
	(0.004)			(0.005)		
PublicPolicy		−0.005			−0.006	
		(0.005)			(0.007)	
GoodFaith			0.006			0.009
			(0.016)			(0.022)
Size	0.023***	0.023***	0.023***	0.033***	0.033***	0.033***
	(0.002)	(0.002)	(0.002)	(0.005)	(0.005)	(0.005)
SalesGrowth	0.003***	0.003***	0.003***	0.027***	0.027***	0.027***
	(0.001)	(0.001)	(0.001)	(0.006)	(0.006)	(0.006)
Q	−0.001***	−0.001***	−0.001***	−0.003	−0.003	−0.003
	(0.000)	(0.000)	(0.000)	(0.002)	(0.002)	(0.002)
ROA	−0.015**	−0.015**	−0.015**	0.058	0.058	0.058
	(0.006)	(0.006)	(0.006)	(0.041)	(0.041)	(0.041)
Leverage	−0.012	−0.012	−0.012	−0.077***	−0.077***	−0.077***
	(0.007)	(0.007)	(0.007)	(0.017)	(0.017)	(0.017)
Cash	−0.051***	−0.051***	−0.051***	−0.096***	−0.095***	−0.096***
	(0.010)	(0.010)	(0.010)	(0.027)	(0.028)	(0.027)
StockReturn	0.001	0.001	0.001	−0.005	−0.005	−0.005
	(0.001)	(0.001)	(0.001)	(0.003)	(0.003)	(0.003)
InstitutionalOwnership	−0.000**	−0.000**	−0.000**	−0.000	−0.000	−0.000
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
Age	0.037***	0.037***	0.037***	−0.053**	−0.056**	−0.056**
	(0.006)	(0.006)	(0.006)	(0.022)	(0.022)	(0.022)
GDPperCapita	−0.032	−0.033	−0.028	−0.123***	−0.123***	−0.116***
	(0.021)	(0.025)	(0.025)	(0.034)	(0.043)	(0.042)
GDPGrowth	0.005	0.009	0.005	0.059	0.064	0.058
	(0.022)	(0.026)	(0.026)	(0.043)	(0.051)	(0.050)
Firm FE	Yes	Yes	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes	Yes	Yes
Adj. R^2	0.747	0.747	0.747	0.583	0.583	0.582
N	48,396	48,396	48,396	12,837	12,837	12,837

Table IA2
Implied-contract exception and managerial job security

This table reports the results from the OLS regression models for the effect of implied-contract exception on managerial job security. Managerial job security is measured by *ForcedTurnover* in Columns (1) and (2), and measured by *CEOTenure* in Columns (3) and (4). *ForcedTurnover* is a dummy variable that equals one if a firm involves CEO forced turnover, and zero otherwise. CEO forced turnover events are collected from the dataset in Jenter and Kanaan (2015). We follow Campbell, Gallmeyer, Johnson, Rutherford, and Stanley (2011) to include variables that affect forced turnover. *Executive&directorOwnership* is the percentage of a firm's equity owned by non-CEO executives and directors. All the information for the CEO's age, tenure and compensation structure are obtained directly from BoardEX. *Industry-adjustedROA* is ROA minus the industry median of that ratio in a given year. *Industry-adjustedReturn* is a firm's annual stock return minus the industry median of that ratio in a given year. All standard errors in parentheses are adjusted for heteroscedasticity and clustered at the state level. All continuous variables are winsorized at their 1^{st} and 99^{th} percentiles. *, ** and *** indicate significance at the 10%, 5% and 1% level, respectively. Detailed variable definitions are in Appendix A.

	ForcedTurnover	*ForcedTurnover*	*CEOTenure*	*CEOTenure*
	(1)	(2)	(3)	(4)
ImpliedContract	−0.081*	−0.055**	4.126***	1.640***
	(0.042)	(0.022)	(0.937)	(0.559)
PublicPolicy		−0.025		2.491**
		(0.038)		(0.959)
GoodFaith		−0.000		0.736*
		(0.011)		(0.294)
FirmSize	0.014	0.014	0.335	0.333
	(0.014)	(0.014)	(0.439)	(0.440)
CEOAge	−0.004**	−0.004**	0.273***	0.273***
	(0.002)	(0.002)	(0.049)	(0.049)
CEOTenure	0.002	0.002		
	(0.001)	(0.001)		
CEOOwnership	−0.000	−0.000	0.469*	0.469*
	(0.001)	(0.001)	(0.234)	(0.234)
CEOBonus	−0.011*	−0.011*	0.142	0.140
	(0.007)	(0.007)	(0.110)	(0.110)
CEOSalary	0.053*	0.053*	3.300***	3.300***
	(0.030)	(0.030)	(0.951)	(0.951)
Executive&directorOwnership	0.002	0.002	−0.443	−0.443
	(0.002)	(0.002)	(0.378)	(0.378)
Industry-adjustedROA	0.019	0.019	0.079	0.089
	(0.086)	(0.086)	(1.586)	(1.588)
Industry-adjustedReturn	−0.000	−0.000	0.170***	0.169***
	(0.002)	(0.002)	(0.058)	(0.058)
Firm FE	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes
Adj. R^2	0.127	0.127	0.821	0.821
N	4166	4166	4159	4159

Table IA3
Parallel assumption test with industry-year fixed effects

This table reports the parallel assumption tests for the difference-in-differences analysis. All the regressions include industry-year fixed effects. The second row shows the dependent variables in each regression. $ImpliedCcontract_{t-1}$, $ImpliedContract_{t-2}$ and $ImpliedContract_{t-3}$ are included in Equation 1, which are dummy variables that equal one if a state will pass the law three years later, two years later and one year later, respectively, and zero otherwise. Control variables are identical to those in Equation 1. All standard errors in parentheses are adjusted for heteroscedasticity and clustered at state-level. All continuous variables are winsorized at their 1^{st} and 99^{th} percentiles. *, ** and *** indicate significance at the 10%, 5% and 1% level, respectively.

	Full sample	Full sample	Full sample	Diversified sample	Diversified sample	Diversified sample
	$1-HHI(assets)$	$1-HHI(sales)$	$Refocusing$	$1-HHI(assets)$	$1-HHI(sales)$	$Refocusing$
	(1)	(2)	(3)	(4)	(5)	(6)
$ImpliedContract_{t-3}$	0.000	0.000	0.004	0.001	0.001	0.012
	(0.005)	(0.004)	(0.008)	(0.009)	(0.007)	(0.023)
$ImpliedContract_{t-2}$	−0.006	−0.007*	0.001	−0.004	−0.008	0.015
	(0.005)	(0.004)	(0.009)	(0.009)	(0.008)	(0.022)
$ImpliedContract_{t-1}$	−0.006	−0.006	0.000	−0.010	−0.010	0.016
	(0.004)	(0.004)	(0.011)	(0.007)	(0.007)	(0.026)
$ImpliedContract_{t}$	−0.011**	−0.011**	0.011**	−0.016*	−0.020***	0.020*
	(0.004)	(0.004)	(0.004)	(0.009)	(0.007)	(0.011)
Control variables	Yes	Yes	Yes	Yes	Yes	Yes
Firm FE	Yes	Yes	Yes	Yes	Yes	Yes
Industry-year FE	Yes	Yes	Yes	Yes	Yes	Yes
Adj. R^2	0.750	0.755	0.021	0.588	0.604	0.082
N	48,396	48,396	48,396	12,837	12,837	12,837

Table IA4
The alternative measures of M&A decisions

This table presents the results for M&A decisions. In columns (1) and (2), the dependent variable is *DiversifyingM&A SIC3*, which equals one if a firm acquires a target from a different 3-digit SIC industry, and zero otherwise. In columns (3) and (4), the dependent variable is *Non-diversifyingM&A SIC3*, which equals one if the acquirer and target belong to the same 3-digit SIC industry, and zero otherwise. In columns (5)-(8), the dependent variables are constructed in the same way as those in columns (1)-(4), respectively, but are restricted to M&A deals involving U.S. target firms only. All standard errors in parentheses are adjusted for heteroscedasticity and clustered at state-level. All continuous variables are winsorized at their 1^{st} and 99^{th} percentiles. *, ** and *** indicate significance at the 10%, 5% and 1% level, respectively. Detailed variable definitions are in Appendix A.

	Full sample	Diversified sample	Full sample	Diversified sample	Full sample	Diversified sample	Full sample	Diversified sample
	DiversifyingM&A SIC3		*Non-diversifyingM&A SIC3*		*DiversifyingM&A SIC3 w/US*		*Non-diversifyingM&A SIC3 w/US*	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
ImpliedContract	−0.007	−0.010	0.001	0.002	−0.005	−0.009	−0.002	0.004
	(0.006)	(0.007)	(0.007)	(0.013)	(0.006)	(0.007)	(0.007)	(0.012)
PublicPolicy	0.012**	0.011	0.011*	0.008	0.012**	0.012*	0.010	−0.003
	(0.006)	(0.008)	(0.006)	(0.009)	(0.005)	(0.006)	(0.006)	(0.013)
GoodFaith	−0.017	0.027	−0.007	0.072***	−0.027**	0.000	−0.007	0.038
	(0.013)	(0.027)	(0.017)	(0.023)	(0.010)	(0.013)	(0.017)	(0.040)
Size	0.050***	0.033***	0.064***	0.066***	0.043***	0.027***	0.054***	0.056***
	(0.004)	(0.005)	(0.005)	(0.010)	(0.004)	(0.006)	(0.004)	(0.011)
SalesGrowth	0.015***	0.026***	0.015***	0.028*	0.015***	0.026***	0.014***	0.030**
	(0.003)	(0.007)	(0.003)	(0.014)	(0.003)	(0.007)	(0.003)	(0.013)
Q	0.004***	0.005**	0.004***	0.015**	0.003***	0.003	0.003***	0.014***
	(0.001)	(0.003)	(0.001)	(0.006)	(0.001)	(0.002)	(0.001)	(0.005)
ROA	−0.004	0.004	−0.015	0.110**	−0.004	0.002	−0.016	0.092**
	(0.010)	(0.033)	(0.013)	(0.042)	(0.010)	(0.031)	(0.012)	(0.041)
Leverage	−0.016	−0.004	−0.023**	−0.015	−0.018	−0.013	−0.024**	−0.008
	(0.014)	(0.021)	(0.011)	(0.027)	(0.012)	(0.020)	(0.010)	(0.027)
Cash	−0.048***	−0.022	−0.065***	−0.089*	−0.034**	−0.018	−0.059***	−0.061
	(0.014)	(0.038)	(0.015)	(0.047)	(0.013)	(0.034)	(0.014)	(0.044)
StockReturn	0.005**	0.004	0.007***	0.001	0.006**	0.005	0.008***	0.001
	(0.003)	(0.004)	(0.002)	(0.006)	(0.003)	(0.004)	(0.002)	(0.006)
InstitutionalOwnership	−0.000	−0.000	−0.000	−0.000	−0.000	−0.000	−0.000	−0.000
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
Age	−0.036***	−0.034	−0.068***	−0.092***	−0.018**	−0.013	−0.052***	−0.068**
	(0.007)	(0.028)	(0.008)	(0.030)	(0.007)	(0.021)	(0.008)	(0.029)
GDPperCapita	0.010	−0.011	0.048	−0.045	−0.015	−0.029	0.018	−0.096
	(0.023)	(0.036)	(0.037)	(0.085)	(0.024)	(0.028)	(0.032)	(0.080)
GDPGrowth	0.066	0.154**	0.008	0.162	0.081**	0.145***	0.013	0.198
	(0.044)	(0.074)	(0.060)	(0.150)	(0.038)	(0.048)	(0.049)	(0.140)
Firm FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Adj. R^2	0.246	0.187	0.236	0.268	0.231	0.161	0.210	0.222
N	48,396	12,837	48,396	12,837	48,396	12,837	48,396	12,837

Table IA5
Split sample analysis by firm age

This table presents the results from the estimation of Equation 1 using samples split by firm age. Young and established firms are split based on the median of firm age in a given year. All standard errors in parentheses are adjusted for heteroscedasticity and clustered at state-level. Control variables are identical to those in Equation 1. All continuous variables are winsorized at their 1^{st} and 99^{th} percentiles. *, ** and *** indicate significance at the 10%, 5% and 1% level, respectively. Detailed variable definitions are in Appendix A.

	Young firms	Established firms	Young firms (Diversified sample)	Established firms (Diversified sample)	Young firms	Established firms	Young firms (Diversified sample)	Established firms (Diversified sample)
	$1-HHI(assets)$	$1-HHI(assets)$	$1-HHI(assets)$	$1-HHI(assets)$	$1-HHI(sales)$	$1-HHI(sales)$	$1-HHI(sales)$	$1-HHI(sales)$
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
$ImpliedContract_t$	−0.005	−0.017**	−0.017**	−0.022**	−0.007*	−0.016**	−0.025**	−0.022***
	(0.003)	(0.008)	(0.008)	(0.010)	(0.004)	(0.007)	(0.010)	(0.008)
Control variables	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Firm FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Adj. R^2	0.781	0.755	0.682	0.673	0.785	0.759	0.684	0.691
N	23,279	25,117	6198	6639	23,279	25,117	6198	6639

Table IA6
Difference-in-differences analysis with propensity score matching for refocusing decision

This table presents the results for the difference-in-difference with propensity score matching technique for the refocusing decision. The dependent variable is *Refocusing* that equals one if a firm has less number of 2-digit SIC segments than previous year, and zero otherwise. Control variables are identical to those in Equation 1. All standard errors in parentheses are adjusted for heteroscedasticity and clustered at state-level. All continuous variables are winsorized at their 1^{st} and 99^{th} percentiles. *, ** and *** indicate significance at the 10%, 5% and 1% level, respectively. Detailed variable definitions are in Appendix A.

	Refocusing	*Refocusing*	*Refocusing*	*Refocusing*
	(1)	(2)	(3)	(4)
$ImpliedContract_{t-3}$		0.002		
		(0.014)		
$ImpliedContract_{t-2}$		0.014		
		(0.015)		
$ImpliedContract_{t-1}$		0.005		
		(0.015)		
$ImpliedContract_{t}$	0.012**	0.015**		
	(0.005)	(0.007)		
$Placebo(-2)$			0.000	
			(0.010)	
$Placebo(-3)$				0.001
				(0.009)
Control variables	Yes	Yes	Yes	Yes
Firm FE	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes
Adj. R^2	0.046	0.046	0.046	0.046
N	7802	7802	7802	7802

Table IA7
Implied-contract exception, firm diversification and entrenchment incentives: Diversified sample

This table presents the results for the cross-sectional tests of the effect of the implied-contract exception using diversified sample only. $IndustryHomogeneity_H$, $StockCompensation_L$, and $EIndex_H$ are dummy variables that equal one if the industry homogeneity index is above the median, stock-based compensation is below the median, and the E-index is above the median, respectively. Control variables are identical to those in Equation 1. All standard errors in parentheses are adjusted for heteroscedasticity and clustered at state-level. All continuous variables are winsorized at their 1^{st} and 99^{th} percentiles. *, ** and *** indicate significance at the 10%, 5% and 1% level, respectively. Detailed variable definitions are in Appendix A.

	$1-HHI(assets)$	$1-HHI(sales)$	$1-HHI(assets)$	$1-HHI(sales)$	$1-HHI(assets)$	$1-HHI(sales)$
	(1)	(2)	(3)	(4)	(5)	(6)
$ImpliedContract$	−0.014***	−0.019***	−0.299***	−0.244***	−0.002	0.018
	(0.005)	(0.005)	(0.013)	(0.014)	(0.015)	(0.018)
$ImpliedContract \times IndustryHomogeneity_H$	−0.011**	−0.009*				
	(0.005)	(0.005)				
$IndustryHomogeneity_H$	0.010**	0.011**				
	(0.004)	(0.005)				
$ImpliedContract \times StockCompensation_L$			−0.017*	−0.010		
			(0.009)	(0.010)		
$StockCompensation_L$			0.021***	0.019**		
			(0.007)	(0.008)		
$ImpliedContract \times EIndex_H$					−0.174***	−0.081***
					(0.028)	(0.024)
$EIndex_H$					−0.042*	−0.049**
					(0.022)	(0.024)
Control variables	Yes	Yes	Yes	Yes	Yes	Yes
Firm FE	Yes	Yes	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes	Yes	Yes
Adj. R^2	0.585	0.598	0.693	0.712	0.662	0.688
N	12,795	12,795	2308	2317	1291	1291

Table IA8
Demand for diversification benefits

This table reports estimation results on the demand for the benefits of internal capital markets. Columns (1) and (2) present results for the diversified firm sample, while column (3) presents results for the divested segment sample. The dependent variables are $1-HHI(assets)$, $1-HHI(sales)$, and *CF correlation S* in columns (1) through (3), respectively. Segment-level cash flow correlation, *CF correlation S*, is calculated as the asset-weighted average of cash flow correlations between the divested segment and other segments within a diversified firm, where the weight for each pair is based on the sum of the two segments' assets. Firm-level cash flow correlation, *CF correlation*, is calculated as the asset-weighted average of cash flow correlations between all pairs of segments within a diversified firm, where the weight for each pair is based on the sum of the two segments' assets. The average cash flow-to-assets ratio in a two-digit SIC industry is calculated based on stand-alone firms. All standard errors in parentheses are adjusted for heteroscedasticity and clustered at state-level. All continuous variables are winsorized at their 1^{st} and 99^{th} percentiles. *, ** and *** indicate significance at the 10%, 5% and 1% level, respectively. Detailed variable definitions are in Appendix A.

	Diversified sample	Diversified sample	Divested segment sample
	$1-HHI(assets)$	$1-HHI(sales)$	*CF correlation S*
	(1)	(2)	(3)
ImpliedContract	−0.019**	−0.027***	−0.015
	(0.008)	(0.008)	(0.020)
CF correlation	0.007	−0.005	
	(0.034)	(0.035)	
ImpliedContract× *CF correlation*	0.001	0.029	
	(0.032)	(0.033)	
PublicPolicy	−0.001	0.004	0.056
	(0.007)	(0.006)	(0.041)
GoodFaith	0.003	−0.009	−0.009
	(0.020)	(0.021)	(0.037)
Size	0.013**	0.020***	−0.027
	(0.005)	(0.005)	(0.018)
SalesGrowth	0.005	0.001	0.013
	(0.003)	(0.005)	(0.018)
Q	−0.001	−0.004	−0.014*
	(0.002)	(0.002)	(0.008)
ROA	0.021	0.002	0.145
	(0.026)	(0.027)	(0.203)
Leverage	−0.049***	−0.018	−0.008
	(0.014)	(0.015)	(0.071)
Cash	−0.024	−0.039	0.034
	(0.025)	(0.025)	(0.086)
StockReturn	−0.003	−0.001	0.029*
	(0.002)	(0.002)	(0.016)
InstitutionalOwnership	0.002	0.010	0.034
	(0.021)	(0.024)	(0.087)
Age	−0.082**	−0.081**	−0.078
	(0.036)	(0.034)	(0.103)
GDPperCapita	0.049	0.107**	0.493**
	(0.044)	(0.040)	(0.233)
GDPGrowth	0.000	−0.000	−0.002
	(0.000)	(0.000)	(0.001)
Segment FE	No	No	Yes
Firm FE	Yes	Yes	No
Year FE	Yes	Yes	Yes
Adj. R^2	0.660	0.670	0.191
N	12,821	12,821	2170

Table IA9
Employment costs and diversification

This table presents the robustness checks for baseline results from the estimation of Equation 1. Columns (1) and (2) report the results with the additional control variable of employment costs (*EmploymentCosts*), which is constructed as total staff expenses scaled by total assets. Columns (3) and (4) report the results for the interaction of the DiD estimator with a dummy variable ($EmploymentCosts_H$) that splits firms into high and low employment costs, defined based on the median value in a given year. All standard errors in parentheses are adjusted for heteroscedasticity and clustered at state-level. All continuous variables are winsorized at their 1^{st} and 99^{th} percentiles. *, ** and *** indicate significance at the 10%, 5% and 1% level, respectively. Detailed variable definitions are in Appendix A.

	$1-HHI(assets)$	$1-HHI(sales)$	$1-HHI(assets)$	$1-HHI(sales)$
	(1)	(2)	(3)	(4)
ImpliedContract	−0.028**	−0.031**	−0.023	−0.027
	(0.014)	(0.012)	(0.019)	(0.018)
EmploymentCosts	0.051	0.044		
	(0.044)	(0.034)		
$ImpliedContract \times EmploymentCosts_H$			−0.009	−0.008
			(0.016)	(0.016)
$EmploymentCosts_H$			0.014	0.014
			(0.011)	(0.011)
PublicPolicy	−0.013	−0.012	−0.014	−0.013
	(0.013)	(0.013)	(0.013)	(0.013)
GoodFaith	−0.016	−0.019	−0.016	−0.019
	(0.012)	(0.016)	(0.012)	(0.016)
Size	0.017*	0.018*	0.014*	0.015*
	(0.009)	(0.010)	(0.008)	(0.009)
SalesGrowth	0.003*	0.004***	0.003**	0.004***
	(0.002)	(0.001)	(0.002)	(0.002)
Q	−0.002	−0.002	−0.002	−0.002
	(0.002)	(0.002)	(0.002)	(0.002)
ROA	−0.019	−0.014	−0.016	−0.011
	(0.037)	(0.038)	(0.036)	(0.036)
Leverage	0.009	0.021	0.002	0.016
	(0.034)	(0.029)	(0.035)	(0.030)
Cash	0.027	0.034	0.021	0.028
	(0.029)	(0.023)	(0.028)	(0.023)
StockReturn	0.001	−0.001	0.001	−0.001
	(0.003)	(0.003)	(0.003)	(0.003)
InstitutionalOwnership	−0.001**	−0.001**	−0.001**	−0.001**
	(0.000)	(0.000)	(0.000)	(0.000)
Age	0.016	0.017	0.021	0.021
	(0.021)	(0.020)	(0.020)	(0.021)
GDPperCapita	−0.124*	−0.164**	−0.131*	−0.170**
	(0.071)	(0.070)	(0.069)	(0.068)
GDPGrowth	0.017	0.014	0.018	0.015
	(0.068)	(0.063)	(0.068)	(0.063)
Firm FE	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes
Adj. R^2	0.877	0.887	0.877	0.887
N	4554	4554	4554	4554

Table IA10
Implied-contract exception and capital allocation efficiency: Additional control variables

This table presents the results from the estimation of Equation 3, with additional control variables. The dependent variable is *CapitalAllocation* in each regression. Control variables are identical to those in Equation 1. All standard errors in parentheses are adjusted for heteroscedasticity and clustered at state-level. All continuous variables are winsorized at their 1^{st} and 99^{th} percentiles. *, ** and *** indicate significance at the 10%, 5% and 1% level, respectively. Detailed variable definitions are in Appendix A.

	(1)	(2)	(3)	(4)
	CapitalAllocation	*CapitalAllocation*	*CapitalAllocation*	*CapitalAllocation*
	(1)	(2)	(3)	(4)
$ImpliedContract$	0.004**	0.005**	0.002	−0.012*
	(0.002)	(0.002)	(0.002)	(0.007)
$ImpliedContract \times Diversity_H$		0.004*		
		(0.003)		
$Diversity_H$		−0.004		
		(0.003)		
$ImpliedContract \times SegmentQ_H$			0.003	−0.001
			(0.002)	(0.003)
$SegmentQ_H$			−0.007***	−0.003
			(0.002)	(0.002)
$ImpliedContract \times SegmentQ_H \times StockCompensation_L$				0.013*
				(0.007)
Control variables	Yes	Yes	Yes	Yes
Segment FE	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes
Adj. R^2	0.355	0.361	0.356	0.452
N	31,919	31,919	31,919	6838