

# **Alternative Work Arrangements, Payout Policy, and Employment: Evidence from Independent Contractor Misclassification Statute**

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Using the 2004 Massachusetts Independent Contractor Law that discourages the use of independent contractors, I find that firms adopt conservative financial policies by reducing payout since companies attempt to reduce financial risk in response to increased operating leverage. I find that the effect is more pronounced in industries with a higher proportion of independent contractors, and in firms with high financial constraints and operating leverage. I also find that the state government's attempt to improve the misclassified worker's status reduces the number of employees at the firm level by 4.4%, highlighting that reclassification does not lead to an increase in the number of employees. The findings imply that heightened operating risk caused by the law may lead to risk-averse financial policies and subdued job creation at the firm level.

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## 1. Introduction

Firms employ alternative work arrangements (e.g., independent contractors) to increase their operating flexibility, since they can adjust the number of independent contractors relatively easily, based on the concurrent product demand (Abraham and Taylor, 1996; Segal and Sullivan, 1997; Houseman, 2001; Autor, 2003; Ono and Sullivan, 2013; Cappelli and Keller, 2013).<sup>1</sup>

Whereas employers may terminate the employment contract of an independent contractor with a small expense when the contract expires, firms face legal and monetary hurdles when attempting to fire regular employees. Thus, hiring independent contractors makes firms' employment costs more flexible, implying lower operating risk.

I examine how the variation in the use of alternative work arrangements affects a firm's payout policy. The use of independent contractors is negatively associated with a firm's operating leverage because of the labor flexibility from the contractors. Prior theoretical literature highlights the trade-off between operating risk and financial risk (Mauer and Triantis, 1994). Firms with low operating flexibility exhibit highly fixed cost structures, and the rigidity in cost makes such firms more vulnerable to adverse shocks in product demand. The decrease in sales leads to more pronounced reduction in income for firms with high operating leverage. Thus, firms with inelastic operations are likely to adopt more conservative financial policy to compensate for the high operating risk. Facing the reduced use of independent contractors, firms may reduce the amount of payout to decrease financial risk in response to higher operating leverage.

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<sup>1</sup> Throughout this paper, I use the terms 'alternative work arrangements (AWA)' and 'independent contractors' interchangeably, since independent contractors account for a majority of AWAs and are the focus of this paper. According to the May 2017 survey by the Bureau of Labor Statistics, independent contractors (10.6 million people in the U.S.) are larger than the other alternative work arrangements, such as on-call workers (2.6 million people), temporary help agency workers (1.4 million people), and workers provided by contract firms (933,000 people).

However, testing the relation between payout policy and the use of alternative work arrangements may be subject to endogeneity concern. For instance, the positive relation between the use of independent contractors and payout policy may be jointly determined by firm size. Large firms may have more capacity to distribute internal funds to shareholders and hire a greater number of independent contractors than small firms. Or, labor and financial policies of a firm may be jointly determined by unobservable, omitted firm characteristics. Thus, one needs to isolate the variation in only one of the two to establish a causal relation between the use of alternative work arrangements and payout policy.

As a main identification strategy, I exploit the Massachusetts Independent Contractor Law statute adopted in 2004.<sup>2</sup> The main purpose of the statute is to prevent misclassification of a firm's workers. In general, if a worker is subject to an employer's control, his/her service is related to the usual business of an employer, or a worker is not established as an independent business entity, then the worker should be classified as an employee of a firm; otherwise, the worker is an independent contractor. Since firms do not have to withhold labor-related federal and state taxes for independent contractors and save other cost items such as employee benefit plans or employee supervision expenses, firms may have incentives to misclassify employees as independent contractors. However, this may pose a significant damage to workers. For instance, if a dishwasher at a restaurant works for more than forty hours per week and is misclassified as an independent contractor, not an employee, then the worker may be paid less than the minimum wage and not receive overtime pay, but is not protected by any employee-related acts due to the worker's legal status as an independent contractor. Thus, federal and state governments strive to

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<sup>2</sup> Although the Massachusetts Independent Contractor Law, M.G.L. c. 149, §148B, was first enacted in 1990, the law went largely unnoticed before the 2004 revision, and practitioners mainly referred to the federal law test (e.g. twenty-factor tests used by the Internal Revenue Service) to determine a worker's legal status. See <https://www.morse.law/news/mass-independent-contractor-law>.

curb such misclassification practice by imposing substantial monetary liability on the misclassifying employers.

The unique feature of the 2004 Massachusetts Independent Contractor Law is that it increases the penalties for misclassification and significantly broadens the applicability of the statute. In December 2004, an advisory from the Massachusetts Attorney General states that the newly amended statute “*excludes far more workers from independent contractor status than are disqualified under the IRS common law test.*”<sup>3</sup> From 2004 onward, Massachusetts applies an independent contractor classification test that is different and more difficult than the ones applied at the federal level or in other states, which eventually gets the attention of businesses in Massachusetts after the law adoption in 2004.

After the law adoption, firms in Massachusetts become concerned about the possible violation of the new statute, the likelihood of private civil actions by the ‘misclassified’ workers, and the incremental compliance cost. For instance, in 2016, Uber Technologies reached a \$100 million proposed settlement with approximately 385,000 drivers in California and Massachusetts.<sup>4</sup> Moreover, firms incur additional expenses such as unemployment insurance and worker compensation insurance premiums and additional contributions to employee benefit plans, when they reclassify the misclassified workers as employees.<sup>5</sup> As a result, the act induces firms to either stop using independent contractors, or ‘reclassify’ the status of the pertinent workers to employees. Either way, it leads to a reduction in the number and the proportion of

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<sup>3</sup> See <https://www.wcribma.org/mass/AttorneyGeneralAdvisory.pdf>.

<sup>4</sup> See <https://independentcontractorcompliance.com/2019/03/12/a-tale-of-two-100-million-dollar-independent-contractor-misclassification-settlements/>.

<sup>5</sup> See

[http://www.woodllp.com/Publications/Articles/pdf/Ten\\_Consequences\\_of\\_Reclassifying\\_Independent\\_Contractors\\_as\\_Employees.pdf](http://www.woodllp.com/Publications/Articles/pdf/Ten_Consequences_of_Reclassifying_Independent_Contractors_as_Employees.pdf).

alternative work arrangements at the firm level, implying higher operating leverage following the 2004 Massachusetts Independent Contractor Law. Due to the trade-off between operating risk and financial risk (Mauer and Triantis, 1994), higher operating leverage after the law adoption should lead to more conservative financial policy, implying lower payout by a firm.

I consider two forms of payout: dividends and stock repurchases. Dividends are persistent over time and generally associated with permanent cash flows (Jagannathan, Stephens, and Weisbach, 2000). Firms are reluctant to reduce or skip dividends and prior studies also document the dividend smoothing behavior of firms (Lintner, 1956; Brav, Graham, Harvey, and Michaely, 2005; Leary and Michaely, 2011). In contrast, stock repurchases are more likely to be related to business cycles or transient cash flows (Guay and Harford, 2000; Jagannathan, Stephens, and Weisbach, 2000). Bonaime, Hankins, and Harford (2014) document that stock repurchases give firms more flexibility. Overall, stock repurchases offer more flexibility than dividends do. Thus, the adjustment in corporate payouts should be more pronounced for stock repurchases than for dividends in response to the reduced use of alternative work arrangements after the law adoption.

I use a difference-in-differences design to estimate the effect of variation in the use of independent contractors on corporate payout policy. Treated firms are the ones located in Massachusetts and control firms are the ones headquartered in other U.S. states. My sample period extends from 2000 to 2007. I include firm- and state-level controls, and firm and industry x year fixed effects. I find both dividends and stock repurchases are lower for the treated firms compared to the control firms after the law adoption, and the gap is more pronounced for stock repurchases, consistent with the notion that firms can adjust stock repurchase more easily than dividends. Stock repurchases are lower for the treated firms by 28.8% (-0.0045/0.0156) relative to the sample mean than for the controls, and dividends are lower for the treated firms by 16% (-

0.0008/0.0050) relative to the sample mean than for the controls. The inference is robust to using alternative measures of dividends and stock repurchases.

I also examine whether the lower payout for the treated firms reflects a mere ongoing trend or results from the 2004 Massachusetts Independent Contractor Law by examining the dynamic effect of the statute on corporate payout. Following Bertrand and Mullainathan (2003), I create an indicator variable for each year from one year before the law adoption (-1) to three or more than three years ( $\geq +3$ ) after the law adoption and interact them with the treatment dummy. I find that the decreased payout for the treated firms takes place only after the adoption of the 2004 Massachusetts Independent Contractor Law. This alleviates the concern that the reduced payout for the treated firms stems from a pre-treatment trend or reverse causality.

To verify that the result is robust to using a sample with common support between treatment group and control group, I use propensity score matching. Using the logistic model and the firm-level characteristics used in the baseline regression, I estimate propensity scores based on the probability that an observation is included in the treatment group. I match each treatment observation to one in a control group with replacement based on the closest propensity score. I find that the lower payout for the treated firms is robust to using the propensity-score matched sample. This alleviates the concern that the documented effect is driven by the difference in underlying fundamentals between the two groups.

I also ascertain that the lower payout for the treated firms is driven by the firms in industries with higher proportion of independent contractors. I identify the top five (construction / professional and business services / other services / retail trade / education and health services) and the bottom five (mining / information / wholesale trade / agriculture and related products / manufacturing) industries based on the proportion of independent contractors for each industry,

according to the 2005 Contingent and Alternative Employment Arrangements survey by the Bureau of Labor Statistics.<sup>6</sup> I find that the lower dividends and stock repurchases after the law adoption are more pronounced for the firms in industries with a high proportion of independent contractors. This result strengthens the inference that reduced operating flexibility caused by the subdued use of independent contractors leads to conservative payout policy.

I conduct another cross-sectional analysis based on a firm's financial constraints. Since reduced use of alternative work arrangements signals increased operating risk for a firm, financially constrained firms should implement more conservative payout policies following the law adoption, since such firms lack internal financial slack or have difficulty in tapping into external financing to withstand the downturn in product demand. I use two financial constraint indices following Hadlock and Pierce (2010) and Whited and Wu (2006), and an indicator based on debt rating. I find that the lower dividends and stock repurchases for the treated firms are more pronounced for financially constrained firms.

Next, I examine whether the lower payout is indeed more pronounced for firms with higher operating leverage, and whether the 2004 Massachusetts Independent Contractor Law leads to increased operating risk for the treated firms. I follow Novy-Marx (2011) to create a measure of operating leverage (risk) for a firm. I find the firms with higher operating leverage drive the decrease in dividends and stock repurchases in the treatment group after the law adoption. Also, I put the operating leverage proxy as a dependent variable and follow the test specification by Eisfeldt and Papanikolaou (2013) and find that the law adoption leads to increased operating leverage for the treated firms. This is consistent with the notion that reduced

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<sup>6</sup> I exclude financial activities from the top 5 industries due to the initial sample construction criteria, and public administration from the bottom 5 industries since there is no observation in the full sample.

use of independent contractors leads to high operating risk, which induces the affected firms to adopt conservative payout policy.

Lastly, I examine whether the state government's attempt to curb misclassification of workers leads to higher or lower use of employees at the firm level. One predicts that the formerly 'mistreated' workers may be reclassified as employees, thus increasing the employment level for the affected firms. However, others voice a concern that the law adoption discourages the use of total labor, especially for financially constrained firms, since the affected firms are subject to higher operating risk after the law adoption. I find that the misclassification statute discourages the use of labor. The number of employees is lower for the treated firms by 4.4% ( $e^{-0.0453} - 1$ ) after the law adoption, and the effect is more pronounced for financially constrained firms. This result bears a policy implication that the state government's attempt to improve workers' welfare may lead to an unintentional repercussion of subdued job creation at the firm level.

To the best of my knowledge, this paper is the first to examine the relation between alternative work arrangements and corporate financial policy in the US setting. Kuzmina (2018) exploits the Spanish labor market program and studies how more flexible employment contracts increase a firm's debt capacity by reducing its operating leverage. Chino (2019) uses Japanese labor market deregulation that facilitates the use of temporary agency workers in manufacturing firms and finds that firms' increased use of alternative work arrangement leads to a decrease in cost of equity capital, owing to reduced operating leverage. My results are consistent with the above two papers in showing that the use of alternative work arrangements causes a variation in firm-level operating leverage which also affects how conservative a firm's financial policy is.



My paper is also related to the studies highlighting the relation between labor-induced operating leverage and corporate financial policy. For instance, Serfling (2016) shows that an increased cost in firing employees leads to higher labor-induced operating leverage, which decreases a firm's debt usage. Ghaly, Dang, and Stathopoulos (2017) find that skilled workers offer low labor flexibility, which induces firms to hold more cash reserves. However, these studies do not look into how alternative work arrangements play a role in affecting operating leverage and corporate financial policy.

This paper also bears a policy implication that the governmental attempt to improve worker welfare may lead to an unintentional consequence of subdued job creation at the firm level. The purpose of the 2004 Massachusetts Independent Contractor Law is to give a legal status of an employee to the formerly 'misclassified' independent contractors so that the misclassified workers become eligible for various employee-protection measures. However, the law also discourages the overall use of independent contractors which increased firm-level operating risk. Facing higher labor-induced operating leverage, firms in Massachusetts subsequently become less active in hiring employees.

This paper is organized as follows. Section 2 describes the institutional background of the use of independent contractors and why the 2004 Massachusetts Independent Contractor Law is a binding concern for the firms in Massachusetts. Section 3 presents data, sample, and model description. Section 4 discusses the results, and Section 5 concludes this paper.

## **2. Institutional Background**

### **2.1. Why Companies Use Independent Contractors**

Firms may increase operating flexibility and save fixed cost items by hiring independent contractors (ICs), instead of employees.<sup>7</sup> A labor contract with ICs tend to be on a short-term or project basis, and this enables firms to adjust the level of their workforce to variation in product demand. For instance, an accounting firm may hire an independent established CPA to audit a firm or process overflow work during busy periods in a year. Also, firms are not obliged to spend money and time training ICs or withhold Federal Insurance Contribution Act (FICA) and Federal Unemployment Tax Act (FUTA) excise tax for ICs. Independent contractors are not entitled to minimum wage or overtime pay. Firms do not contribute to state unemployment and workers compensation insurance for ICs and save costs related to payroll tax compliance and worker supervision when it comes to independent contractors.

## **2.2. Independent Contractor Misclassification**

However, when cost-minimizing incentives go overboard, employers may misclassify their employees as independent contractors to save on labor-related expenses and circumvent the legal liabilities under various employment laws. Misclassification of employees as independent contractors harms the welfare of the misclassified workers. Workers who are fully devoted to a firm may be paid less than minimum wage or deprived of their overtime pay and other employee protection measure if they are misclassified. Misclassification also leads to lower tax revenues for federal and state governments since firms are not obligated to withhold labor-related taxes for ICs. For instance, New York Department of Labor's Unemployment Insurance Division reveals that more than \$175 million, as an annual average, went underreported for the tax payments to the state unemployment insurance from 2002 to 2005 (Deknatel and Hoff-Downing, 2015).

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<sup>7</sup> Every U.S. firm is obligated to classify their workers as either employees or independent contractors.

These tax ‘savings’, in some occasions, reduce firms labor costs by 20-40% (Belman and Block, 2008).

Although De Silva, Millet, Rotondi, and Sullivan (2000) find that around 30% of audited firms misclassify their workers, this does not necessarily imply that every misclassification is deliberate. The 2015 White Paper by Richard Reibstein states that the overwhelming majority of firms misclassify their workers due to either lack of attention to legal requirements or misunderstanding regarding the pertinent independent contractor laws.<sup>8</sup> Since both federal government and state governments apply their own tests to determine whether a firm should classify a worker as an employee or an independent contractor, the firm need to be fully aware of both federal regulations and state-level laws. However, a 2006 Government Accountability Office (GAO) report points out that “the tests used to determine whether a worker is an independent contractor or an employee are complex, subjective, and differ from law to law.”<sup>9</sup> This confusion may add to unintentional misclassification of workers by some firms.

Regardless of whether misclassification is intentional or not, the risk can be substantial for a misclassifying firm. Misclassifying employers may be subject to foregone FICA and FUTA contributions or income tax liability that should have been withheld when the firms hire a worker as an employee but classify him/her as an independent contractor. If a misclassified worker has been paid less than minimum wage or deprived of overtime pay, the misclassifying firm is subject to monetary liability for the foregone labor expenses. State governments may also claim a liability from a misclassifying firm for the unpaid state unemployment insurance premiums and worker compensation insurance premiums. An enforcing authority may impose civil or criminal

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<sup>8</sup> See <https://independentcontractorcompliance.com/legal-resources/white-paper>.

<sup>9</sup> See <http://www.gao.gov/new.items/d06656.pdf>

penalties for misclassification, and the misclassified workers may file a lawsuit against their employers. For instance, Swift Transportation Co. reaches a \$100 million settlement with almost 20,000 drivers in a suit claiming the firm's violation of state wage and contract laws and the FLSA, owing to the firm's misclassification practice. The value of the settlement is on the rise, recently. To mitigate the financial liability from the employment-related lawsuits, firms can buy Employment Practices Liability Insurance (EPLI). However, the EPLI generally does not cover independent contractor misclassification-related issues.<sup>10</sup>

### **2.3. Determining a Worker's Status: Federal Regulation and Massachusetts**

The most notable federal agency in terms of worker classification is the IRS. The IRS applies the "common law test" in determining whether a worker is an employee or an independent contractor for FICA, FUTA, and other federal employment taxes. The IRS test determines worker classification based on a firm's right to control a worker in terms of where, when, and how a task is conducted by the worker. The IRS considers twenty factors in applying the common law test.<sup>11</sup> Many U.S. businesses over time have become familiar with the IRS test in worker classification. Thus, the twenty-factor test has become the standard for classifying workers. However, distinct worker classification regulation for each state may add to confusion from U.S. businesses since different states may apply their own tests.

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<sup>10</sup> See [http://www.lanermuchin.com/media/news/27\\_NovDec17\\_Feature-EPLI.pdf](http://www.lanermuchin.com/media/news/27_NovDec17_Feature-EPLI.pdf)

<sup>11</sup> According to the twenty factor test by the IRS, workers are generally employees, "if they (1) must comply with employer's instructions about the work; (2) receive training from or at the direction of the employer; (3) provide services that are integrated into the business; (4) provide services that must be rendered personally; (5) hire, supervise, and pay assistants for the employer; (6) have a continuing working relationship with the employer; (7) must follow set hours of work; (8) work full time for an employer; (9) do their work on the employer's premises; (10) must do their work in a sequence set by the employer; (11) must submit regular reports to the employer; (12) receive payments of regular amounts at set intervals; (13) receive payments for business and/or traveling expenses; (14) rely on the employer to furnish tools and materials; (15) lack a major investment in facilities used to perform the service; (16) cannot make a profit or suffer a loss from their services; (17) work for one employer at a time; (18) do not offer their services to the general public; (19) can be fired at any time by the employer; and (20) may quit work at any time without incurring liability."

The 2004 Massachusetts Independent Contractor Law expands the application of the law from unemployment compensation purposes only to the wage law requirements, including minimum wage and overtime pay. The law also increases the monetary penalty for both intentional and unintentional misclassification. Intentional violations may cost employers up to \$25,000 of fines or a one-year imprisonment for a first offense, and up to \$50,000 of fines or a two-year imprisonment for further violations. Even if the misclassification is unintentional, the employer may be subject to \$10,000 to \$25,000 of monetary fines or six months to one-year imprisonment, depending on whether the firm violated the law for the first time or not.

The crucial part of the 2004 Massachusetts statute is that it significantly expands the applicability of the statute by amending the ABC test, which is the criteria used in Massachusetts to determine worker's status. The ABC test presumes that "an individual performing any service" is an employee, and it requires an employer to comply with the three provisions to classify a worker as an independent contractor.<sup>12</sup> The 2004 law adoption deletes the "*or is performed outside of all places of business of the enterprise*" part from the second provision of the ABC test that originally goes as, "*such service is performed either outside the usual course of the business for which the service is performed or is performed outside of all places of business of the enterprise.*" This means that, prior to 2004, a Massachusetts firm may classify a worker as an independent contractor as long as the worker remains in a location outside any establishment of a firm, even though the worker is performing tasks related to the usual course of business of

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<sup>12</sup> The three provisions in the ABC test prior to 2004 in Massachusetts are as follows: "(a) such individual has been and will continue to be free from control and direction in connection with the performance of such services, both under his contract for the performance of service and in fact; and (b) such service is performed either outside the usual course of the business for which the service is performed or is performed outside of all the places of business of the enterprise for which the service is performed; and (c) such individual is customarily engaged in an independently established trade, occupation, profession or business or the same nature as that involved in the service performed."

the employer. However, from 2004 onward, any personnel in charge of tasks related to day-to-day business of a firm must be classified as an employee, regardless of the worker's location. This impacts many businesses in Massachusetts that hire independent contractors who work at client's locations, home, or any other business office that the contractor owns. As a result, in December 2004, the Massachusetts Attorney General who enforces the law issued an advisory declaring that the newly amended statute "*excludes far more workers from independent contractor status than are disqualified under the IRS common law test.*"

The 2004 Massachusetts Independent Contractor Law offers much stricter worker classification test than the IRS test available at the federal level. This means that the Massachusetts businesses must thoroughly re-examine their workers' status to ensure the businesses are free from any liability coming from misclassification, regardless of whether the misclassification has been willful or not. Also, with stricter state regulation, employees may file lawsuits against their employers for misclassification, and the resulting cost imposed on the employer may be substantial. For instance, if the workers have worked over forty hours per week without receiving overtime pay (normally 1.5 times the regular pay rate) because of their independent contractor status, they may claim the amount that is three times the owed payment for a period up to three years to the past.

One obvious response by the firms in Massachusetts is to reclassify the workers as employees. However, that means the firms now proactively pay employee benefits, state unemployment insurance and worker compensation premiums, and withhold federal taxes for the reclassified workers. This adds to the fixed portion of labor costs, which is likely to lead to higher labor-induced operating leverage, discouraging the use of the former 'independent contractors.' Also, the reclassification may subject the firms to the retroactive liability for the

foregone payments (e.g. taxes that have not been withheld for the former ‘independent contractors.’), which adds to the cost of reclassification. Regardless of whether firms reclassify workers as employees, or just terminate the use of former ‘independent contractors,’ firms face lower operating flexibility due to the reduced use of alternative work arrangements following the law adoption, and this signals higher operating risk for the firms in Massachusetts.<sup>13</sup>

### **3. Data and Empirical Methods**

#### **3.1. Sample Selection**

My sample covers publicly listed Compustat industrial firms (excluding financials and utilities) from 2000 to 2007, eight years surrounding the adoption of the 2004 Massachusetts Independent Contractor Law. I end my sample in 2007 since the Great Recession in 2008 may confound the analysis. Following Farre-Mensa, Michaely, and Schmalz (2014), I require firms to be both in Compustat and CRSP, be incorporated in the United States, be listed on either the NYSE, AMEX, or NASDAQ, have valid stock prices in CRSP, and have a CRSP share code of 10 or 11. I only consider firm-years with non-missing, positive values for book assets and sales. I set cash dividends and repurchases to zero if missing and keep observations with a non-negative value for payout variables. I also require observations to have non-missing values for 3-digit SIC and exclude the observations in which the Compustat variable ‘sale\_fn’ equals ‘AB’ to omit firms experiencing major mergers. All values in the sample are adjusted for inflation in 2009 dollars.

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<sup>13</sup> I have to assume that the 2004 law adoption leads to reduced use of independent contractors because of data limitation. The BLS only presents few cross-sectional data on alternative work arrangements at the broad industry level (e.g. 2-digit NAICS) available for February 1995, 1997, 1999, 2001, 2005, and May of 2017. Bernhardt (2014) highlights the gap in data in terms of alternative work arrangements research. The reduced use of independent contractors is a concern shared by many law practitioners after the law adoption. See <https://www.morse.law/news/mass-independent-contractor-law>.

I obtain historical headquarter addresses of firms using the ‘Augmented 10-X Header Data’ presented by Software Repository for Accounting and Finance.<sup>14</sup> Similar to the prior studies examining the association between labor and corporate financial policy (Agrawal and Matsa, 2013; Serfling, 2016; Dang, De Cesari, and Phan, 2018), I assume that labor-related laws mainly pertain to the state where independent contractors are working. The state where a firm’s headquarter is situated is likely to have a majority of its establishments. Following Smith (2016), I supplement the missing historical addresses using Compustat header file. I also delete observations with missing values for any of the dependent and control variables used in the payout regressions. The final sample consists of 27,902 firm-year observations.

### 3.2 Empirical Models

To study the effect of the variation in the use of alternative work arrangements on corporate payout policy, I exploit the 2004 Massachusetts Independent Contractor Law and estimate the following difference-in-difference (DID) model:

$$Payout_{ist} = b_1 Treat * Post_{st} + \gamma' X_{ist} + v_i + w_{jt} + e_{ist}$$

where  $i$ ,  $s$ ,  $j$ , and  $t$  denote firm, firm’s headquarter state, industry, and year, respectively. I use three payout measures as dependent variable: cash dividend scaled by assets, the dollar value of share repurchases scaled by assets, and the sum of dividend payment and repurchase scaled by assets. *Treat* is an indicator equal to one if a firm is headquartered in Massachusetts, and zero otherwise. *Post* is an indicator equal to one if a firm’s fiscal year-end comes after the adoption of the 2004 Massachusetts Independent Contractor Law, and zero otherwise. The coefficient of

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<sup>14</sup> The data are easily obtainable at <https://sraf.nd.edu/data/augmented-10-x-header-data>.



*Treat\*Post* shows the variation in payout policy for the treated firms after the regime change in Massachusetts.

I include firm fixed effects to control for time-invariant firm characteristics and industry x year fixed effects to account for time-varying characteristics at the industry level that may affect payout policy and the likelihood that Massachusetts adopts the misclassification statute. I do not include *Treat* and *Post* separately in the regression since both are subsumed by a linear combination of firm fixed effects and industry x year fixed effects, respectively. For control variables, I include cashflow, cash holdings, capital expenditure, market-to-book ratio, total liabilities, firm size proxied by the NYSE percentile of a firm's market capitalization, the natural log of firm's age, a dummy for negative earnings, idiosyncratic risk, state GDP growth rate, and the log of state population in the baseline regression (Fama and French, 2001; Kahle, 2002; DeAngelo, DeAngelo, and Stulz, 2006; Hoberg and Prabhala, 2009). The detailed definitions of variables are in Appendix A. Standard errors are adjusted for heteroscedasticity and clustered at the state level to correct for serial correlation within a given state (Bertrand, Duflo, and Mullainathan, 2004).

### **3.3. Summary Statistics**

Table 1 reports the descriptive statistics for the variables in this paper. Since the payout dependent variables have numerous zero values and outliers with huge positive values, I winsorize them at their 98th percentile. For the firm-level continuous variables used in the payout regressions, I winsorize them at their 1st and 99th percentiles. On average, firms engage in annual stock repurchases amounting to 1.56% of their book assets, whereas an average firm pays dividends amounting to 0.5% of its book assets. These statistics show that stock repurchases are more pronounced than dividends payment during the sample period, consistent with Skinner

(2008). About 6% of the observations in the full sample belong to the treatment group, and the observations after the law adoption covers 43% of the full sample.

[Insert Table 1 here.]

## **4. Results**

### **4.1. Use of Alternative Work Arrangements and Payout Policy**

#### **4.1.1. Baseline Results**

Table 2 presents the results from examining the effect of the use of alternative work arrangements on corporate payout policy. I use OLS with firm fixed effects and industry x year fixed effects. The dependent variables are dividends, share repurchases, and total payout scaled by book assets. Column (1) Table 2 shows that after the law adoption, the dividends are lower for the treated firms by 16% (-0.0008/0.0050) relative to the sample mean. In Column (2) Table 2, the subdued payout after the law adoption is more pronounced for stock repurchases which are lower for the treated firms by 28.8% (-0.0045/0.0156) relative to the sample mean. Higher operating risk caused by the limited use of independent contractors leads to more pronounced reduction in stock repurchases than in dividends. This is consistent with Bonaime, Hankins, and Harford (2014), who assert that firms resort to adjusting the more flexible mode of payout rather than reducing dividends. Even though dividends are often sticky and firms are reluctant to reduce dividends (Jagannathan et al., 2000; Lintner, 1956; Brav et al., 2005; Leary and Michaely, 2011), the fact that the Massachusetts firms also decrease stock dividends implies that the use of alternative work arrangements is economically significant for the businesses in Massachusetts.

[Insert Table 2 here.]

To corroborate that the reduced use of alternative work arrangements leads to more pronounced decline for stock repurchases than for dividends, in Appendix B, I examine whether the reduced use of independent contractors leads to lower payout flexibility. Since repurchases are more easily adjustable than dividends (Bonaime et al., 2014), if the reduction in payout is more pronounced than that in dividends, then it should lead to lower payout flexibility. I follow Bonaime et al. (2014) to construct a measure of payout flexibility, which is defined as repurchases scaled by total payout for a firm in year  $t$ . The result in Appendix B shows that the heightened operating risk caused by the discourage use of independent contractors leads to lower payout flexibility, consistent with the result in Table 2. The proportion of stock repurchases relative to total payout goes down by 2.8%, significant at the 1% level.

#### **4.1.2. Examining Pre-Treatment Trend**

In Table 3, I examine whether the documented reduction in payout for the treated firms merely reflects a pre-treatment trend or not. I follow Bertrand and Mullainathan (2003) and decompose  $Post$  into dummy variables equal to one for each year from one year before the law adoption (-1) to three or more than three years after the law adoption ( $\geq 3$ ).  $Post_{t=-1}$  is an indicator variable equal to one if the statute is adopted one year later, and zero otherwise.  $Post_{t=0}$  is an indicator variable equal to one if the statute is adopted in the current year, and zero otherwise.  $Post_{t=1}$  is an indicator variable equal to one if the statute was already adopted one year earlier, and zero otherwise.  $Post_{t=2}$  is an indicator variable equal to one if the statute was already adopted two years earlier, and zero otherwise.  $Post_{t \geq 3}$  is an indicator variable equal to one if the statute was already adopted two years earlier, and zero otherwise. I interact each indicator with  $Treat$  to examine whether the reduced payout for the treated firms occurs only after the adoption of the 2004 Massachusetts Independent Contractor Law. I also include lagged dividends and

stock repurchases, respectively, to account for mean reversion in payout policy. Columns (1) and (2) in Table 3 report that the reduction in payout for the treated firms only happens after the law adoption. This alleviates the concern that the decreased payout merely reflects the pre-treatment trend or is driven by reverse causality.

[Insert Table 3 here.]

#### **4.1.3. Alternative Measure of Payout**

I also check whether the result is robust to alternative measures of payout. I use dividends and stock repurchases scaled by market capitalization, respectively, and the natural log of dividends and repurchases as dependent variables. Columns (1) and (2) in Table 4 shows the results when the dependent variables are scaled by market capitalization. Higher operating risk caused by the discouraged use of alternative work arrangements leads to reduction in dividends and stock repurchases that are 0.1% and 0.26% of market capitalization, respectively. Column (3) and (4) in Table 4 shows that the reduced use of independent contractors diminishes dividends and stock repurchase by 16.2% ( $e^{-0.1763} - 1$ ) and 22% ( $e^{-0.2486} - 1$ ). In sum, Table 4 shows that the result is robust to using alternative measures of dividends and stock repurchases as dependent variables.

[Insert Table 4 here.]

#### **4.1.4. Propensity Score Matching**

To mitigate the concern that the documented reduction in payout is driven by differences in fundamentals between the treated and the control, I use propensity score matching method. With *Treat* as a dependent variable, I run the logistic regression estimating the probability that an observation is included in the treatment group, using the firm-level controls in the baseline

regression. I match each treated observation to an observation in the control group (with replacement) based on the closest propensity score (with a maximum difference between propensity scores of 0.005). When treatment observations have multiple control observation matches, I retain the match with the closest propensity score. Panel A, Table 5 shows the means of the matched variables and propensity scores for the treatment and the control groups. Panel A shows no significant difference in means for any of the independent variables and the propensity scores between the two groups. This implies that the two groups in the matched sample share common support in terms of underlying firm fundamentals. Using the matched sample, in Panel B, Table 5, I run the same regression model as in Table 3. I find that dividends and stock repurchases are lower for the treated firms by 0.4% and 1.3% relative to book assets, respectively, after the law adoption. The results in Table 5 alleviate the concern that the reduced payout after the law adoption is driven by the difference in firm fundamentals between the two groups.

[Insert Table 5 here.]

## **4.2. Cross-sectional Analyses**

### **4.2.1. Proportion of Independent Contractors at the Industry Level**

If the reduced payout after the law adoption is indeed driven by the law discouraging the use of independent contractors, then the results should be more pronounced for firms that extensively hire the contractors. To the best of my knowledge, there is no nation-wide database in the U.S. that regularly records the number of independent contractors hired at the firm or the establishment level. The next best alternative is 2005 Contingent and Alternative Employment Arrangements survey by the Bureau of Labor Statistics. The data are collected in supplements to

the Current Population Survey (CPS), which is a nationwide periodic survey of U.S. households that gathers information on employment and other demographic characteristics. The 2005 survey offers the proportion of independent contractors in each of 14 industries classified by the BLS according to North American Industry Classification Systems (NAICS).<sup>15</sup> For instance, among the 10.3 million independent contractors in the U.S., 22% of them belongs to construction industry (NAICS 23), and 21.3% of them are in professional and business services (NAICS 54-56), according to the 2005 supplement. I pick the top five (construction / professional and business services / other services / retail trade / education and health services) and the bottom five (mining / information / wholesale trade / agriculture and related products / manufacturing) industries based on the proportion of independent contractors at the industry level documented by the survey. I exclude financial activities from the top five due to the initial sample construction criteria, and public administration from the bottom five since there is no observation in the sample. I also delete transportation and utilities since the full sample does not contain utility sectors. Thus, to consider the same number of industries in both subsamples, I further omit leisure and hospitality, as well. I create two subsamples based on whether an observation belongs to the top five or the bottom five industries, based on the proportion of independent contractors.

Table 6 shows that the lower payout driven by the discouraged use of alternative work arrangements is indeed more pronounced for the firms in industries with high proportion of independent contractors. High independent contractor industries in the treatment group see their dividends diminished by 0.14% relative to book assets, whereas the low independent contractor industries show 0.05% decline in dividends relative to book assets. As for stock repurchases, the

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<sup>15</sup> To see the BLS standard for sector aggregation titles using NAICS, see [https://www.bls.gov/bls/naics\\_aggregation.htm](https://www.bls.gov/bls/naics_aggregation.htm).

difference in magnitude of the decline between the two groups shows even more contrast than the one for dividends. High independent contractor industries in the treatment group diminish their repurchases by 1.16% relative to book assets, and the same figure for low independent contractor industries is 0.29% relative to book assets. In sum, the results in Table 6 corroborates the main finding that the decreased payout for the treated firms after the law adoption is indeed driven by the heightened operating risk due to the discouraged use of independent contractors.

[Insert Table 6 here.]

#### **4.2.2. Financial Constraints**

If the reduced payout is driven by the heightened operating risk caused by lower labor flexibility, then the effect should be more pronounced for financially constrained firms. Mauer and Triantis (1994) highlights the trade-off between operating risk and financial risk, and the operating risk is often measured by operating leverage. Firms with high operating leverage exhibit a large sensitivity of their variation in earnings to change in sales, or overall product demand. Thus, high operating leverage implies large decline in earnings when a firm's sales deteriorate, and it is especially tough for financially constrained firms to remain going concern facing the subdued market demand since such firms lack financial slack or have difficulty tapping into external financing to withstand the downturn in sales. In response, financially constrained firms may be more active in adopting conservative financial policy than the unconstrained counterpart to reduce overall risk exposure (operating plus financial).

In Table 7, I use the two financial constraint indexes following Hadlock and Pierce (2010) and Whited and Wu (2006), and debt rating to create an indicator for firm-level financial constraints. *High HP* is an indicator variable equal to one if a firm in year  $t$  has above-median

value of the size and age index for the full sample, and zero otherwise. *High WW* is an indicator equal to one if a firm in year  $t$  has above-median value of the Whited and Wu (2006) index for the full sample, and zero otherwise. *No Rating* is an indicator equal to one if a firm in year  $t$  does not have an investment-grade S&P Domestic Long Term Issuer Credit Rating, and zero otherwise. I estimate difference-in-difference-in-difference model by interacting each financial constraint dummy with *Treat\*Post* and see whether the reduced payout is indeed more pronounced for financially constrained firms. Thus, the main variable of interest in Table 7 is *Treat\*Post\*High HP (High WW or No Rating)*.

Column (1) and (2) in Table 7 show the more pronounced decline in dividends and stock repurchases for financially constrained firms based on the size and age index. The coefficient of *Treat\*Post\*High HP* is negative and statistically significant at the 1% level for both dividends and stock repurchases. The same inference follows when I use Whited and Wu index. In Column (3) and (4), Table 7, the coefficient of *Treat\*Post\*High WW* is also negative and significant at the 1% level for both dividends and repurchases. Although Column (5) in Table 7 does not show significant result for the firms without investment-grade debt rating, Column (6) in Table 7 shows more pronounced decline in stock repurchases for the firms without investment-grade debt rating which may not readily tap into external debt financing. In sum, the decline in payout due to the heightened operating risk caused by the reduced use of alternative work arrangements is more pronounced for financially constrained firms than for the unconstrained counterparts.

[Insert Table 7 here.]

### 4.3. Operating Leverage



So far, I assume that the 2004 Massachusetts Independent Contractor Law discourages the use of alternative work arrangements and reduces the operating flexibility of a firm, as a result. I now directly examine whether the reduced payout for the treated firms is driven by those with high operating leverage, and whether the law adoption leads to higher subsequent operating leverage for the affected firms. First, I borrow a measure of operating leverage from Novy-Marx (2011). Novy-Marx (2011) defines a measure of operating leverage as annual operating costs divided by book assets, and annual operating costs are the sum of cost of goods sold (COGS) and selling, general, and administrative expenses (XSGA). Higher measure signals higher operating leverage for a firm.

In Column (1) and (2) for Table 8, I interact the operating leverage measure with  $Treat*Post$  to see if the treated firms with high operating leverage react more sensitively to the discourage use of independent contractors by reducing payout more than the ones with lower operating leverage. If the trade-off between operating risk and financial risk is a channel behind the reduced payout after the law adoption, then the decrease in dividends and repurchases should be more pronounced for the ones with high operating leverage. Column (1) and (2) in Table 8 show that is indeed the case. The coefficient of  $Treat*Post*Op\_Lev$  is negative and significant at the 1% level, showing that the reduced payout after the law adoption is driven by the firms with high operating leverage. The results in Column (1) and (2) in Table 8 corroborates the hypothesis that the reduced payout is driven by the trade-off between operating risk and financial risk (Mauer and Triantis, 1994).

I also put the operating leverage measure as a dependent variable in Column (3), Table 8, to see whether the 2004 Massachusetts Independent Contractor Law increases operating risk due to the discouraged use of alternative work arrangements. In Column (3), Table 8, the coefficient

of  $Treat*Post$  is positive and significant, implying that the law adoption leads to increase in operating leverage.

Second, as another test specification for the variation in operating leverage following the law adoption, I follow Eisfeldt and Papanikolaou (2013) and run the following panel regression model:

$$Change\ in\ Log\ (EBIT)_{ist} = a + b_1 Treat * Post_{st} + b_2 Change\ in\ Log\ (Sale)_{it} + b_3 Treat * Post * Change\ in\ Log\ (Sale)_{it} + \gamma' X_{it} + v_i + w_{jt} + e_{ist},$$

where  $i$ ,  $s$ ,  $j$ , and  $t$  denote firm, firm's headquarter state, industry, and year, respectively. The control variables are the same ones used in the baseline regression, and I include firm fixed effects and industry x year fixed effects. The dependent variable is the change in the natural log of EBIT for a firm in year  $t$ , and I examine how the relation between the change in EBIT and the change in sales is affected by the law adoption. Firms with high operating risk see their earnings change more sensitively to change in sales, compared with the ones with low operating risk. Thus, if the 2004 Massachusetts Independent Contractor Law discourages the use of alternative work arrangements and reduce operating flexibility, then the law should lead to higher sensitivity of change in earnings to change in sales.

Column (4) in Table 8 confirms that is indeed the case. The coefficient of  $Change\ in\ Log\ (Sale)$  shows that, before the law adoption, a 1% decrease in sales is associated with a 1.477% decline in EBIT. Starting from 2004, however, a 1% decrease in sales is associated with a 1.866% decline in EBIT, for a relative increase of 27.7% ( $= 0.4093/1.4770$ ). In sum, the discouraged use of independent contractors leads to increased operating leverage.

[Insert Table 8 here.]

#### 4.4 Repercussion for Employment at the Firm Level

Lastly, I examine whether the 2004 Massachusetts Independent Contractor Law leads to an increase or a decrease in the number of employees at the firm level. The main purpose of the statute is to classify the formerly ‘misclassified’ independent contractors as employees so that the mistreated workers become entitled to labor rights such as minimum wage, overtime pay, unemployment insurance. Induced by the state statute, if a firm reclassifies its workers as employees, then that should lead to an increase in the number of employees reported in Compustat. However, regardless of whether a firm reclassifies its workers as employees or just terminates the use of independent contractors, this leads to increased proportion of employees relative to total workforce, reducing labor flexibility. An increase in labor-induced operating leverage not driven by anticipation of increasing product demand may signal higher-than-optimal operating risk for a firm. Thus, firms may adopt measures to reduce operating leverage in response. In that case, the 2004 law adoption may discourage the use of employees, as well.

I use the number of employees in a firm each year reported by Compustat to examine the variation in firm-level employment following the 2004 law adoption. I use the natural log of the number of employees as a dependent variable. Column (1) of Table 9 shows that the firm-level employment goes down by 4.4% ( $=e^{-0.0453} - 1$ ), significant at the 1% level. Thus, despite the state government’s attempt to reclassify the workers as employees, firm reduce the level of employment due to the lower labor flexibility caused by the 2004 Massachusetts Independent Contractor Law.

Furthermore, if the decrease in employment is driven by increased operating risk, then the effect should be more pronounced for financially constrained firms since they may lack internal financial slack or have difficulty in tapping into external financing in case of the

downturn in demand. In Column (2) to (4) in Table 9, I interact  $Treat*Post$  with *High HP*, *High WW*, and *No Rating*, which are the financial constraint indicators used in Table 7. The coefficient of three-way interaction term in each Column in Table 9 is negative and significant. For instance, financially constrained firms based on *High HP* reduce their level of employment by 6.3% ( $=e^{-(0.0350+0.0301)} - 1$ ). In sum, the lower labor flexibility caused by the discouraged use of independent contractors further reduces the level of employment at the firm level, and the effect is more pronounced for financially constrained firms. The results in Table 9 lend support to the concern that the state government's attempt to improve the formerly misclassified workers leads to an overall decrease in the level of workforce, since the law discourages the use of independent contractors and employees.

[Insert Table 9 here.]

#### 4.5. Other Robustness Tests

First, I address the concern that the reduced payout for the Massachusetts firms after the law adoption is driven by the overall difference in payout levels across US states. I compute the median level of dividends over assets (*StateMedDiv*) and repurchases over assets (*StateMedRep*) based on all firms in a state each year and include them in the baseline regression used in Table 2. Column (1) and (2) in Appendix C show that the coefficient of  $Treat*Post$  is negative and significant after controlling for the state-median level payout. This confirms that my results are not merely driven by the difference in payout across US states.

Second, the main results may be driven by the increase in payouts by US multinationals, not by the subdued payout of Massachusetts firms from 2004. Blouin and Krull (2009) and Faulkender and Petersen (2012) document that US multinationals increase their payout to

shareholders as a result of American Job Creation Act of 2004. If those US multinationals are mainly located in US states outside Massachusetts (e.g. New York, California), then the negative coefficient of *Treat\*Post* may be driven by the relative increase in payout for the control group, not the relative decrease in payout for the treatment group. To address this concern, I create an indicator variable, *US\_MNC*, equal to one if a firm in year *t* reports non-negative foreign taxes (TXFO) in Compustat, and zero otherwise. I include *US\_MNC* as an additional control variable in the baseline regression used in Table 2. Column (3) and (4) in Appendix C show that the coefficient of *Treat\*Post* is negative and significant even after controlling for the *US\_MNC* indicator. The result shows that the reduced payout for the treated firms are not merely driven by the relative increase in payout for US multinationals located outside Massachusetts.

## 5. Conclusion

I examine how the variation in the use of alternative work arrangements affects corporate payout policy. I posit that the reduced use of independent contractors caused by the 2004 Massachusetts Independent Contractor Law implies higher operating leverage. Drawing on the trade-off between operating risk and financial risk documented by Mauer and Triantis (1994), I expect firms adopt more conservative financial policy in response to discouraged use of independent contractors.

I find that the discouraged use of alternative work arrangements leads to reduced payout for the treated firms after the law adoption, with more pronounced decline in stock repurchases than in dividends. I show that the result is robust to propensity score matching and alternative measure of payout. The decline in payout is more pronounced for firms in industries with high proportion of independent contractors, financially constrained firms, and those with high operating leverage. The discourage use of independent contractors leads to higher operating

leverage and lower level of employees. This paper bears policy implications that the reduced use of alternative work arrangement caused by the misclassification statute leads to risk-averse financial policy and subdued job creation at the firm level.

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Table 1

## Summary Statistics

This table presents descriptive statistics for the variables in my baseline regression. The sample period spans from 2000 to 2007. The sample contains 27,902 firm-year observations. I take dividends, share repurchases, and total payout scaled by book assets as our dependent variables. I only include firms with positive, non-missing assets, sales, and industrial classification, and exclude financials (SIC 60-69) and utilities (SIC 49). An observation must have non-missing values for the dependent and the independent variables in the baseline regression. I obtain historical address each year for a firm from Augmented 10-X Header Data provided by Software Repository for Accounting and Finance at The University of Notre Dame. I supplement historical address with Compustat header address following Smith (2016). The continuous variables are winsorized at the 1% level. The variable definitions are in Appendix A.

Variable	N	Mean	Std Dev	25th Pctl	Median	75th Pctl
<i>Dividends over Assets</i>	27,902	0.0050	0.0130	0.0000	0.0000	0.0000
<i>Repurchase over Assets</i>	27,902	0.0156	0.0446	0.0000	0.0000	0.0037
<i>Treat</i>	27,902	0.0595	0.2365	0.0000	0.0000	0.0000
<i>Post</i>	27,902	0.4290	0.4949	0.0000	0.0000	1.0000
<i>Cashflow</i>	27,902	0.0196	0.2724	-0.0096	0.0956	0.1585
<i>Cash_Hold</i>	27,902	0.2328	0.2511	0.0328	0.1301	0.3665
<i>Capex</i>	27,902	0.0526	0.0594	0.0165	0.0328	0.0643
<i>Market-To-Book</i>	27,902	2.1781	1.8310	1.1325	1.5735	2.4640
<i>Debt</i>	27,902	0.1978	0.2148	0.0052	0.1408	0.3174
<i>NYSE Percentile</i>	27,902	0.3316	0.2906	0.0627	0.2585	0.5459
<i>Log_Age</i>	27,902	2.3163	0.9728	1.7918	2.3979	2.9957
<i>Neg_Earn</i>	27,902	0.4017	0.4903	0.0000	0.0000	1.0000
<i>Idiosyncratic Volatility</i>	27,902	0.0395	0.0240	0.0218	0.0327	0.0509
<i>GDP_Growth</i>	27,902	0.0534	0.0243	0.0376	0.0509	0.0687
<i>Log_Population</i>	27,902	16.2418	0.8515	15.6049	16.2579	16.9080

Table 2

## The Effect of Independent Contractor Misclassification Statutes on Corporate Payout

This table reports the estimation results of the effect of independent contractor misclassification statutes on corporate payout policy. I take dividends, share repurchases, and total payout scaled by book assets as our dependent variables. I include firm and industry (2-digit SIC)-year fixed effects. I compute  $t$ -statistics (in parentheses) using robust standard errors clustered at the state level. Statistical significance at the 10%, 5%, and 1% levels is indicated by \*, \*\*, and \*\*\*, respectively. Appendix A presents the variable definitions.

	(1) Dividends over Assets	(2) Repurchases over Assets
<i>Treat*Post</i>	-0.0008*** (-3.162)	-0.0045*** (-3.577)
<i>Cashflow</i>	0.0021*** (3.563)	0.0094*** (3.767)
<i>Cash_Hold</i>	0.0018** (2.416)	0.0023 (0.531)
<i>Capex</i>	0.0046** (2.643)	0.0255*** (2.847)
<i>Market-To-Book</i>	0.0003*** (4.402)	-0.0001 (-0.090)
<i>Debt</i>	-0.0021*** (-3.439)	0.0019 (0.543)
<i>NYSE Percentile</i>	-0.0020** (-2.089)	-0.0027 (-0.572)
<i>Log_Age</i>	-0.0009** (-2.254)	0.0013 (0.610)
<i>Neg_Earn</i>	-0.0002 (-0.920)	-0.0008 (-0.924)
<i>Idiosyncratic Volatility</i>	-0.0026 (-0.436)	0.0137 (0.623)
<i>GDP_Growth</i>	0.0041 (1.427)	-0.0070 (-0.414)
<i>Log_Population</i>	0.0007** (2.148)	-0.0054*** (-2.771)
<i>Constant</i>	-0.0070 (-0.930)	0.0808** (2.055)
Industry-Year FE	Yes	Yes
Firm FE	Yes	Yes
Observations	27,902	27,902
Adjusted $R^2$	0.655	0.276

Table 3

## Dynamic Effects on Corporate Payout

This table reports the estimation results of the dynamic effect of independent contractor misclassification statutes on corporate payout policy. I take dividends, share repurchases, and total payout scaled by book assets as our dependent variables.  $Post_{t=-1}$  is an indicator variable equal to one if the statute is adopted one year later, and zero otherwise.  $Post_{t=0}$  is an indicator variable equal to one if the statute is adopted in the current year, and zero otherwise.  $Post_{t=1}$  is an indicator variable equal to one if the statute was already adopted one year ago, and zero otherwise.  $Post_{t=2}$  is an indicator variable equal to one if the statute was already adopted two years ago, and zero otherwise.  $Post_{t \geq 3}$  is an indicator variable equal to one if the statute was already adopted three or more than three years ago, and zero otherwise. I include firm- and state-level controls, lagged dependent variables, and include firm and industry (2-digit SIC)-year fixed effects. I compute  $t$ -statistics (in parentheses) using robust standard errors clustered at the state level. Statistical significance at the 10%, 5%, and 1% levels is indicated by \*, \*\*, and \*\*\*, respectively. Appendix A presents the variable definitions.

	(1) Dividends over Assets	(2) Repurchases over Assets
<i>Treat*Post<sub>t=-1</sub></i>	0.0001 (0.554)	0.0014 (1.251)
<i>Treat*Post<sub>t=0</sub></i>	-0.0002 (-0.904)	-0.0041** (-2.608)
<i>Treat*Post<sub>t=1</sub></i>	-0.0010*** (-3.979)	-0.0037** (-2.268)
<i>Treat*Post<sub>t=2</sub></i>	-0.0009*** (-3.364)	-0.0046*** (-2.896)
<i>Treat*Post<sub>t&gt;=3</sub></i>	-0.0004 (-1.612)	-0.0034* (-1.751)
<i>Cashflow</i>	0.0018*** (2.803)	0.0113*** (3.303)
<i>Cash_Hold</i>	0.0017** (2.080)	-0.0005 (-0.120)
<i>Capex</i>	0.0059*** (3.534)	0.0210** (2.278)
<i>Market-To-Book</i>	0.0003*** (4.415)	0.0005 (0.766)
<i>Debt</i>	-0.0016*** (-2.687)	-0.0012 (-0.329)
<i>NYSE Percentile</i>	-0.0013 (-1.490)	-0.0105*** (-2.779)
<i>Log_Age</i>	0.0001 (0.143)	0.0012 (0.590)
<i>Neg_Earn</i>	0.0001 (0.318)	-0.0017 (-1.617)
<i>Idiosyncratic Volatility</i>	0.0049 (0.923)	-0.0027 (-0.135)
<i>GDP_Growth</i>	0.0010 (0.394)	-0.0158 (-0.878)
<i>Log_Population</i>	0.0005**	-0.0063***

	(2.200)	(-3.558)
<i>Lagged_Div</i>	0.0147*	
	(1.743)	
<i>Lagged_Repurchase</i>		0.0240**
		(2.576)
<i>Constant</i>	-0.0001	0.1125***
	(-0.009)	(3.727)
Industry-Year FE	Yes	Yes
Firm FE	Yes	Yes
Observations	22,217	22,231
Adjusted $R^2$	0.747	0.378

Table 4

## Alternative Measures of Payout

This table reports the estimation results of the effect of independent contractor misclassification statutes on corporate payout policy, using alternative measure of payout. In Panel A, I take dividends scaled by market capitalization, sales, and the natural logarithm of dividends as our dependent variables, respectively. In Panel B, I take share repurchases scaled by market capitalization, sales, and the natural logarithm of share repurchases as our dependent variables, respectively. I include firm and industry (2-digit SIC)-year fixed effects. I compute *t*-statistics (in parentheses) using robust standard errors clustered at the state level. Statistical significance at the 10%, 5%, and 1% levels is indicated by \*, \*\*, and \*\*\*, respectively. Appendix A presents the variable definitions.

	(1)	(2)	(3)	(4)
	Dividends over Mktcap	Repurchase over Mktcap	Log (Dividends)	Log (Repurchase)
<i>Treat*Post</i>	-0.0010*** (-4.895)	-0.0026*** (-3.613)	-0.1763*** (-3.956)	-0.2486*** (-3.365)
<i>Cashflow</i>	0.0004 (0.967)	0.0060*** (2.992)	0.7812*** (3.622)	1.2289*** (2.680)
<i>Cash_Hold</i>	0.0006 (1.077)	0.0013 (0.415)	-0.2110 (-1.146)	0.1631 (0.552)
<i>Capex</i>	-0.0008 (-0.501)	0.0157* (1.697)	-0.4254 (-1.245)	1.6332 (1.652)
<i>Market-To-Book</i>	0.0001 (1.050)	-0.0006** (-2.458)	-0.0236 (-1.123)	-0.0790 (-1.314)
<i>Debt</i>	-0.0003 (-0.747)	0.0091** (2.664)	0.1117 (0.835)	0.3626 (1.171)
<i>NYSE Percentile</i>	-0.0060*** (-5.100)	-0.0268*** (-6.891)	1.7768*** (7.605)	1.8892*** (4.223)
<i>Log_Age</i>	-0.0002 (-0.651)	-0.0006 (-0.384)	0.2081** (2.063)	0.0284 (0.103)
<i>Neg_Earn</i>	0.0001 (0.591)	-0.0004 (-0.607)	-0.0016 (-0.037)	-0.0950 (-0.861)
<i>Idiosyncratic Volatility</i>	-0.0271*** (-2.995)	0.0521** (2.372)	-4.6312 (-1.664)	-10.3730*** (-3.415)
<i>GDP_Growth</i>	-0.0030 (-1.076)	0.0040 (0.212)	-0.1425 (-0.320)	-2.3468 (-1.483)
<i>Log_Population</i>	0.0006* (1.766)	-0.0039* (-1.947)	0.1932* (1.786)	-0.2146 (-1.506)
<i>Constant</i>	-0.0050 (-0.772)	0.0743** (2.255)	-2.7216 (-1.598)	5.5621** (2.497)
Industry-Year FE	Yes	Yes	Yes	Yes
Firm FE	Yes	Yes	Yes	Yes
Observations	27,902	27,902	6,689	9,164
Adjusted <i>R</i> <sup>2</sup>	0.628	0.202	0.952	0.737

Table 5

## Propensity Score Matching

This table reports the results of estimating the regressions relating the adoption of independent contractor misclassification statutes to corporate payout policy, using the propensity score matched samples over the eight years surrounding the law adoption. The treatment and control groups consist of firm-year observations and the firms are headquartered in Massachusetts which adopts the statute in 2004, and other US states. I require a firm to have eight years of data to be included in the matched sample. For the matching, I estimate propensity scores using firm-level characteristics used in the baseline regression. I match each treatment observation to an observation in the control group (with replacement) based on the closest propensity score (with a maximum difference between propensity scores of 0.005). When treatment observations have multiple control observation matches, I retain the match with the closest propensity score. Panel A shows the means of the matched variables and propensity scores for the treatment and control groups. Panel B presents the results showing the impact of the independent contractor misclassification statute on payout policy. I use dividends and share repurchases scaled by book assets as the dependent variables. I include firm and industry (2-digit SIC)-year fixed effects. I compute *t*-statistics (in parentheses) using robust standard errors clustered at the state level. Statistical significance at the 10%, 5%, and 1% levels is indicated by \*, \*\*, and \*\*\*, respectively. All the variables are defined in Appendix A.

Panel A: Comparison of Means across Matched Samples			
	(1)	(2)	(3)
	Treatment Group (Obs. = 879)	Control Group (Obs. = 879)	Difference in Means ( <i>t-stat</i> )
<i>Propensity Score</i>	0.0811	0.0811	0.0000 (0.000)
<i>Cashflow</i>	0.0037	0.0177	0.0140 (1.24)
<i>Cash_Hold</i>	0.3476	0.3401	-0.0075 (-0.59)
<i>Capex</i>	0.0408	0.0397	-0.0011 (-0.58)
<i>Market-To-Book</i>	2.4062	2.3610	-0.0452 (-0.52)
<i>Debt</i>	0.1402	0.1299	-0.0103 (-1.13)
<i>NYSE Percentile</i>	0.3407	0.3223	-0.0184 (-1.39)
<i>Log_Age</i>	2.4613	2.4148	-0.0465 (-1.23)
<i>Neg_Earn</i>	0.4721	0.4733	0.0011 (0.05)
<i>Idiosyncratic Volatility</i>	0.0382	0.0382	0.0001 (0.07)

  

Panel B: Adoption of the Misclassification Statute and Payout Policy		
	(1)	(2)
	Dividends over Assets	Repurchases over Assets
<i>Treat*Post</i>	-0.0040*** (-2.753)	-0.0130* (-1.905)

<i>Cashflow</i>	0.0055*** (3.236)	0.0178** (2.131)
<i>Cash_Hold</i>	0.0025 (0.966)	0.0008 (0.063)
<i>Capex</i>	-0.0069 (-1.261)	0.0820 (1.469)
<i>Market-To-Book</i>	0.0004 (1.676)	0.0005 (0.433)
<i>Debt</i>	-0.0060*** (-2.727)	0.0077 (0.400)
<i>NYSE Percentile</i>	-0.0092*** (-3.052)	-0.0264 (-1.404)
<i>Log_Age</i>	-0.0041** (-2.564)	0.0007 (0.049)
<i>Neg_Earn</i>	-0.0010* (-1.841)	0.0009 (0.223)
<i>Idiosyncratic Volatility</i>	0.0150 (0.420)	-0.1090 (-0.796)
<i>GDP_Growth</i>	0.0428 (0.833)	0.0057 (0.023)
<i>Log_Population</i>	-0.0045* (-1.992)	-0.0016 (-0.218)
<i>Constant</i>	0.0933** (2.431)	0.0542 (0.381)
Industry-Year FE	Yes	Yes
Firm FE	Yes	Yes
Observations	1,758	1,758
Adjusted $R^2$	0.666	0.347



Table 6

## Cross-sectional Analysis: Proportion of Independent Contractors by Industry

This table reports the subsample analysis based on the proportion of independent contractors in each industry, reported by the 2005 Contingent and Alternative Employment Arrangements from the Bureau of Labor Statistics. I choose the top 5 industries (excluding financial industries due to initial sample construction) and the bottom 5 industries (excluding public administration due to no observation in the sample) based on the proportion and conduct the analysis in each subsample. I use dividends and share repurchases scaled by book assets as our dependent variables, respectively. I include firm and industry (2-digit SIC)-year fixed effects. I compute *t*-statistics (in parentheses) using robust standard errors clustered at the state level. Statistical significance at the 10%, 5%, and 1% levels is indicated by \*, \*\*, and \*\*\*, respectively. Appendix A presents the variable definitions.

	High Independent Contractor	Low Independent Contractor	High Independent Contractor	Low Independent Contractor
	(1)	(2)	(3)	(4)
	Dividends over Assets	Dividends over Assets	Repurchase over Assets	Repurchase over Assets
<i>Treat*Post</i>	-0.0014** (-2.126)	-0.0005** (-2.370)	-0.0116*** (-5.733)	-0.0029* (-1.928)
<i>Cashflow</i>	0.0043*** (2.996)	0.0020*** (3.262)	0.0297*** (2.702)	0.0063** (2.343)
<i>Cash_Hold</i>	0.0029 (1.394)	0.0014 (1.419)	-0.0029 (-0.262)	0.0034 (0.753)
<i>Capex</i>	0.0087* (1.681)	0.0040** (2.545)	0.0560** (2.014)	0.0215* (2.000)
<i>Market-To-Book</i>	0.0009** (2.558)	0.0003** (2.637)	0.0001 (0.062)	-0.0002 (-0.290)
<i>Debt</i>	-0.0040 (-1.487)	-0.0016* (-1.912)	-0.0011 (-0.089)	0.0008 (0.221)
<i>NYSE Percentile</i>	-0.0034 (-1.051)	-0.0019** (-2.031)	-0.0122 (-0.795)	-0.0006 (-0.113)
<i>Log_Age</i>	-0.0006 (-0.717)	-0.0010** (-2.261)	0.0063 (1.401)	-0.0005 (-0.222)
<i>Neg_Earn</i>	0.0003 (0.778)	-0.0002 (-0.904)	-0.0030 (-1.172)	-0.0002 (-0.255)
<i>Idiosyncratic Volatility</i>	0.0205 (1.347)	-0.0098 (-1.507)	0.0271 (0.533)	0.0191 (0.808)
<i>GDP_Growth</i>	-0.0045 (-0.565)	0.0065 (1.643)	-0.0335 (-0.850)	-0.0040 (-0.165)
<i>Log_Population</i>	0.0028** (2.105)	0.0003 (1.003)	-0.0004 (-0.090)	-0.0082*** (-4.556)
<i>Constant</i>	-0.0376 (-1.649)	0.0009 (0.097)	0.0303 (0.408)	0.1366*** (3.517)
Industry-Year FE	Yes	Yes	Yes	Yes
Firm FE	Yes	Yes	Yes	Yes
Observations	5,694	20,267	5,694	20,267
Adjusted <i>R</i> <sup>2</sup>	0.519	0.689	0.299	0.267

Table 7

## Cross-Sectional Analysis: Financial Constraints

This table examines how financial constraints impact the effect of independent contractor misclassification statutes on corporate payout policy. I use *No Rating*, an indicator equal to one if a firm in year  $t$  does not have an investment-grade S&P Domestic Long Term Issuer Credit Rating, and zero otherwise, *High WW*, and *High HP*, which are indicators equal to one if a firm in year  $t$  has above-median value for each financial constraint index measure, respectively, and zero otherwise. I take dividends, and share repurchases scaled by book assets as our dependent variables. I include firm and industry (2-digit SIC)-year fixed effects. I compute  $t$ -statistics (in parentheses) using robust standard errors clustered at the state level. Statistical significance at the 10%, 5%, and 1% levels is indicated by \*, \*\*, and \*\*\*, respectively. Appendix A presents the variable definitions.

	(1)	(2)	(3)	(4)	(5)	(6)
	Dividends over Assets	Repurchase over Assets	Dividends over Assets	Repurchase over Assets	Dividends over Assets	Repurchase over Assets
<i>Treat*Post*High HP</i>	-0.0011*** (-4.797)	-0.0083*** (-4.354)				
<i>High HP</i>	-0.0001 (-0.513)	0.0019 (1.157)				
<i>Treat*Post*High WW</i>			-0.0019*** (-7.633)	-0.0067*** (-3.551)		
<i>High WW</i>			-0.0012*** (-3.242)	-0.0065*** (-5.080)		
<i>Treat*Post*No Rating</i>					-0.0005 (-1.498)	-0.0268*** (-17.377)
<i>No Rating</i>					-0.0021* (-1.809)	-0.0063 (-1.587)
<i>Treat*Post</i>	-0.0002 (-0.810)	-0.0001 (-0.055)	0.0004 (1.057)	-0.0003 (-0.153)	-0.0004 (-0.906)	0.0205*** (9.098)
<i>Constant</i>	-0.0067 (-0.892)	0.0787* (1.994)	-0.0049 (-0.655)	0.0916** (2.367)	-0.0060 (-0.786)	0.0831** (2.107)
Controls	Yes	Yes	Yes	Yes	Yes	Yes
Industry-Year FE	Yes	Yes	Yes	Yes	Yes	Yes
Firm FE	Yes	Yes	Yes	Yes	Yes	Yes
Observations	27,902	27,902	27,902	27,902	27,899	27,899
Adjusted $R^2$	0.655	0.276	0.656	0.278	0.655	0.277

Table 8

## Operating Leverage

This table examines how firm-level operating leverage associated with the effect of independent contractor misclassification statutes on corporate payout policy. In Column (1) and (2), I interact  $Treat*Post$  with  $Op\_Lev$ , a proxy for operating leverage following Novy-Marx (2011) and use dividends, and share repurchases scaled by book assets as our dependent variables. In Column (3) and (4), I examine how the adoption of the statute affects a firm's operating leverage, following Novy-Marx (2011) and Eisfeldt and Papanikolaou (2013). I include firm and industry (2-digit SIC)-year fixed effects. I compute  $t$ -statistics (in parentheses) using robust standard errors clustered at the state level. Statistical significance at the 10%, 5%, and 1% levels is indicated by \*, \*\*, and \*\*\*, respectively. Appendix A presents the variable definitions.

	(1)	(2)	(3)	(4)
	Dividends over Assets	Repurchase over Assets	Op_Lev	Change in Log (EBIT) <sub>t</sub>
$Treat*Post*Op\_Lev$	-0.0005*** (-2.875)	-0.0048*** (-4.482)		
$Op\_Lev$	0.0002 (1.122)	0.0040*** (2.821)		
$Treat*Post*Change\ in\ Log\ (Sale)_t$				0.4093*** (5.472)
$Change\ in\ Log\ (Sale)_t$				1.4770*** (20.139)
$Treat*Post$	-0.0004 (-1.365)	0.0009 (0.389)	0.0161* (1.683)	-0.0326 (-1.522)
Constant	-0.0018 (-0.195)	0.1038** (2.153)	1.1837*** (3.065)	-1.2165* (-1.720)
Controls	Yes	Yes	Yes	Yes
Industry-Year FE	Yes	Yes	Yes	Yes
Firm FE	Yes	Yes	Yes	Yes
Observations	25,428	25,428	25,428	13,942
Adjusted $R^2$	0.659	0.290	0.805	0.373

Table 9

## Independent Contractor Misclassification Statute and Firm-level Employment

This table examines whether the adoption of independent contractor misclassification statutes lead to increases or decreases in workforce. I use the natural logarithm of number of employees in Compustat as a measure of workforce. In Column (2), (3), and (4), I interact *Treat\*Post* with the financial constraint indicators used in Table 5. I include firm and industry (2-digit SIC)-year fixed effects. I compute *t*-statistics (in parentheses) using robust standard errors clustered at the state level. Statistical significance at the 10%, 5%, and 1% levels is indicated by \*, \*\*, and \*\*\*, respectively. Appendix A presents the variable definitions.

	(1)	(2)	(3)	(4)
	<i>Log (Emp)<sub>t</sub></i>	<i>Log (Emp)<sub>t</sub></i>	<i>Log (Emp)<sub>t</sub></i>	<i>Log (Emp)<sub>t</sub></i>
<i>Treat*Post</i>	-0.0453*** (-3.178)	-0.0350*** (-3.262)	-0.0300** (-2.359)	0.0499*** (3.347)
<i>Treat*Post*High HP</i>		-0.0301* (-1.987)		
<i>High HP</i>		-0.1992*** (-10.620)		
<i>Treat*Post*High WW</i>			-0.0228* (-1.840)	
<i>High WW</i>			-0.1202*** (-11.021)	
<i>Treat*Post*No Rating</i>				-0.1020*** (-6.267)
<i>No Rating</i>				-0.0505* (-1.785)
<i>Constant</i>	-0.0408 (-0.084)	0.2479 (0.526)	0.1463 (0.302)	-0.0193 (-0.040)
Controls	Yes	Yes	Yes	Yes
Industry-Year FE	Yes	Yes	Yes	Yes
Firm FE	Yes	Yes	Yes	Yes
Observations	27,615	27,615	27,615	27,612
Adjusted <i>R</i> <sup>2</sup>	0.975	0.976	0.976	0.975

## Appendix A.

### Variable Definitions

I largely follow Dang, De Cesari, and Phan (2018) in defining the main variables of interest.

Variable	Description (letters in parentheses pertain to Compustat items)
<i>Dependent Variables</i>	
Dividends over assets	Cash dividend (DV) over total assets (AT).
Repurchase over assets	Purchase of common and preferred stock (PRSTKC) minus the reduction in the book value of preferred stock (PSTKRV), scaled by total assets (AT).
Total payout over assets	Sum of repurchases (PRSTKC minus the reduction in PSTKRV) and cash dividends (DV), scaled by total assets (AT)
Dividend over Mktcap	Cash dividend (DV) over market value of equity ( $prcc\_f * csho$ )
Repurchase over Mktcap	Purchase of common and preferred stock (PRSTKC) minus the reduction in the book value of preferred stock (PSTKRV), scaled by market value of equity ( $prcc\_f * csho$ )
Log (Dividends)	The natural log of cash dividends (DV)
Log (Repurchase)	The natural log of stock repurchases (PRSTKC minus the reduction in PSTKRV)
Repurchases over Total Payout	Stock repurchases (PRSTKC minus the reduction in PSTKRV) scaled by total payout (the sum of DV and stock repurchases)
Op_Lev	Measure of operating leverage following Novy-Marx (2011) which is defined as the sum of cost of goods sold (COGS) plus selling, general, and administrative expenses (XSGA) scaled by book assets.
Change in Log (EBIT)	Annual change in the log of earnings before interest and taxes (EBIT).
Log (Emp)	The natural log of the number of employees (EMP) reported in Compustat.
<i>Explanatory Variables</i>	
Treat	An indicator variable equal to one if a firm is headquartered in Massachusetts, and zero otherwise.
Post	An indicator variable equal to one if a firm-year observation is after the adoption date of the 2004 Massachusetts Independent Contractor Law, and zero otherwise.
Change in Log (Sale)	Annual change in the log of sales (SALE)
<i>Control Variables</i>	
Cashflow	Operating income before depreciation (OIBDP) over total assets (AT).
Neg_Earn	Binary variable that is equal to one if earnings before interest are negative, otherwise zero. Earnings before interest is income before extraordinary items (IB) plus interest and related expenses (XINT),

	if available, plus income statement deferred taxes (TXDI), if available.
NYSE percentile	Fraction of NYSE firms with a lower or equal market capitalization in the same year. Market capitalization used in computing NYSE percentile is stock price times the number of outstanding shares (PRC times SHROUT).
Capex	Capital expenditure (CAPX) over total assets (AT)
Idiosyncratic volatility	Standard deviation of the residuals from a regression of the daily stock return (source: CRSP) in excess of the risk free rate (from Kenneth French's website) on the market factor based on the value-weighted market return (source: CRSP). Daily returns over the fiscal year are used.
Log_Age	Log of one plus the number of years since the firm's first appearance in CRSP.
Market-to-book	The market value of assets (book assets (at) plus market value of equity (prcc_f*csho) minus book value of equity (ceq)) scaled by book assets (at).
Debt	Long-term debt (DLTT) plus debt in current liabilities (DLC), scaled by total assets (AT).
Cash_hold	Cash and short-term investments (CHE) over total assets (AT).
GDP_Growth	Annual growth rate in real GDP for a state in year $t$
Log_Population	The natural log of state population in a year.

### *Conditioning Variables*

High WW	Indicator equals one when the WW index is greater than the median value for all firms in each 3-digit SIC industry for the full sample, otherwise zero (Whited and Wu, 2006). I define the WW index as follows: $-0.091 \text{ times } ((IB+DP)/AT) \text{ minus } 0.062 \text{ times indicator for positive dividends plus } 0.021 \text{ times } DLTT/AT \text{ minus } 0.044 \text{ times the natural logarithm of assets plus } 0.102 \text{ times industry sales growth minus } 0.035 \text{ times firm sales growth}$ . The indicator for positive dividends equals one when DVC plus DVP is strictly greater than zero. Firm sales growth is the relative change in SALE. Industry sales growth is the mean of the firm sales growth for the 3-digit SIC industry to which the firm belongs.
High HP	Indicator equals one when the HP index is greater than the median value for all firms in each 3-digit SIC industry for the full sample, otherwise zero (Hadlock and Pierce, 2010). I compute the HP index as follows: $-0.737 \text{ times the natural logarithm of inflation-adjusted (at 2004 price level) book assets (AT) plus } 0.043 \text{ times the squared value of the log of inflation-adjusted book assets minus } 0.04 \text{ times firm age}$ . Firm age is the number of years since the firm's first appearance in Compustat. The inflation-adjusted book assets is capped at 4,500 and the firm age is capped at 37.
No Rating	Indicator equal to one if a firm in year $t$ does not have an investment-grade S&P Domestic Long Term Issuer Credit Rating, and zero otherwise.

Appendix B.

Payout Flexibility

This table reports the estimation results of the effect of independent contractor misclassification statutes on payout flexibility at the firm level. I take repurchases over total payout as a proxy for payout flexibility. I include firm and industry (2-digit SIC)-year fixed effects. I compute *t*-statistics (in parentheses) using robust standard errors clustered at the state level. Statistical significance at the 10%, 5%, and 1% levels is indicated by \*, \*\*, and \*\*\*, respectively. Appendix A presents the variable definitions.

	(1) Repurchases over Total Payout
<i>Treat*Post</i>	-0.028*** (-3.04)
<i>Cashflow</i>	0.117** (2.03)
<i>Cash_Hold</i>	-0.006 (-0.13)
<i>Capex</i>	-0.011 (-0.10)
<i>Market-To-Book</i>	-0.024*** (-4.34)
<i>Debt</i>	-0.049 (-0.98)
<i>NYSE Percentile</i>	0.059 (0.99)
<i>Log_Age</i>	0.082*** (4.82)
<i>Neg_Earn</i>	-0.002 (-0.19)
<i>Idiosyncratic Volatility</i>	0.192 (0.41)
<i>GDP_Growth</i>	-0.341* (-1.86)
<i>Log_Population</i>	-0.001 (-0.06)
<i>Constant</i>	0.437 (1.31)
Industry-Year FE	Yes
Firm FE	Yes
Observations	12,932
Adjusted <i>R</i> <sup>2</sup>	0.700

Appendix C.

Controlling for State-level Median Payout and US Multinationals

This table reports the estimation results of the effect of independent contractor misclassification statutes on corporate payout policy, after controlling for either state-median payout or an indicator variable for US multinationals. I take dividends and share repurchases scaled by book assets as the dependent variables, respectively. *StateMedDiv* (*StateMedRep*) is a median level of dividends (stock repurchases) based on all firms in a state for each year. *US\_MNC* is an indicator variable equal to one if a firm in year  $t$  reports non-negative foreign taxes, and zero otherwise. I include firm and industry (2-digit SIC)-year fixed effects. I compute  $t$ -statistics (in parentheses) using robust standard errors clustered at the state level. Statistical significance at the 10%, 5%, and 1% levels is indicated by \*, \*\*, and \*\*\*, respectively. Appendix A presents the variable definitions.

	(1)	(2)	(3)	(4)
	Dividends over Assets	Repurchases over Assets	Dividends over Assets	Repurchases over Assets
<i>Treat*Post</i>	-0.0006*** (-2.763)	-0.0044*** (-3.480)	-0.0008*** (-3.166)	-0.0045*** (-3.582)
<i>Cashflow</i>	0.0021*** (3.544)	0.0094*** (3.848)	0.0021*** (3.541)	0.0094*** (3.878)
<i>Cash_Hold</i>	0.0018** (2.454)	0.0021 (0.494)	0.0018** (2.421)	0.0022 (0.513)
<i>Capex</i>	0.0045** (2.572)	0.0251*** (2.781)	0.0046** (2.659)	0.0254*** (2.819)
<i>Market-To-Book</i>	0.0003*** (4.473)	-0.0001 (-0.087)	0.0003*** (4.473)	-0.0001 (-0.090)
<i>Debt</i>	-0.0020*** (-3.386)	0.0019 (0.534)	-0.0021*** (-3.425)	0.0020 (0.549)
<i>NYSE Percentile</i>	-0.0021** (-2.187)	-0.0027 (-0.574)	-0.0020** (-2.075)	-0.0027 (-0.567)
<i>Log_Age</i>	-0.0009** (-2.153)	0.0013 (0.623)	-0.0009** (-2.246)	0.0012 (0.614)
<i>Neg_Earn</i>	-0.0002 (-0.861)	-0.0008 (-0.886)	-0.0002 (-0.923)	-0.0008 (-0.923)
<i>Idiosyncratic Volatility</i>	-0.0031 (-0.521)	0.0107 (0.469)	-0.0021 (-0.346)	0.0101 (0.441)
<i>GDP_Growth</i>	0.0049* (1.683)	-0.0055 (-0.345)	0.0040 (1.418)	-0.0081 (-0.472)
<i>Log_Population</i>	0.0008** (2.472)	-0.0048** (-2.444)	0.0007** (2.140)	-0.0052** (-2.640)
<i>StateMedDiv</i>	0.4393** (2.606)			
<i>StateMedRep</i>		0.9208*** (6.548)		
<i>US_MNC</i>			-0.0001 (-0.223)	-0.0003 (-0.294)
<i>Constant</i>	-0.0081 (-1.118)	0.0700* (1.800)	-0.0069 (-0.919)	0.0777* (1.966)
Industry-Year FE	Yes	Yes	Yes	Yes



Firm FE	Yes	Yes	Yes	Yes
Observations	27,902	27,902	27,902	27,902
Adjusted $R^2$	0.656	0.276	0.655	0.276