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Abstract

Better access to debt markets mitigates the effects of uncertainty on corporate policies. We establish this result using the staggered introduction of anti-recharacterization laws in U.S. states. These laws enhanced firms' ability to borrow by strengthening creditors' rights to repossess collateral pledged in SPVs. After the passage of the laws, firms that face more uncertainty hoard less cash and increase payouts, leverage, and investment in intangible assets. Our findings suggest that better access to debt markets shields firms from fluctuations in uncertainty and decreases firms' precautionary behavior, contributing to the deployment of cash and other internal resources to investment in intangible capital.

Over the past three decades, U.S. nonfinancial firms have accumulated record-high cash holdings (Graham and Leary, 2018). This secular trend has sparked widespread interest among academics and policymakers, as the rise in corporate savings has often been associated with lower aggregate investment and weak macroeconomic performance (Summers, 2015, Gruber and Kamin, 2016).

The extant literature has identified in the precautionary motive the most important driver of corporate savings: Firms with limited access to capital markets find it beneficial to hold more cash as a cushion if they operate in an uncertain environment (e.g., Opler et al, 1999; Bates, Kahle, and Stulz, 2009; McLean, 2011; Harford, Klasa, and Maxwell, 2014). While influential, this literature falls short of distinguishing the role of firms' ability to access capital markets from that of uncertainty in explaining firms' incentives to save. The reason is that it is challenging to separate the role of uncertainty from that of a firm's access to capital markets. On the one hand, higher uncertainty may reduce firms' ability to borrow, leading to more precautionary saving; on the other hand, firms may respond to higher uncertainty by delaying investment and hoarding cash, irrespective of their ability to raise external finance.

The purpose of this paper is to study empirically how uncertainty affects firms' precautionary behavior when firms' ability to access external finance improves for reasons that are independent of their investment opportunities and the uncertainty they face. We find that as firms' ability to raise external finance improves, firms that face higher uncertainty increase leverage and payouts and hoard less cash. Our analysis helps inform the discussion on the theoretical determinants of corporate financial policies and on the usefulness of some government interventions to influence firms' propensity to save.

In recent theories of dynamic corporate financial policies, cash is not negative debt (Gamba and Triantis, 2008; Riddick and Whited, 2009). A standard prediction from this class of models is that firms hold precautionary cash balances when external finance is costly and the environment is uncertain, because cash is an instrument to absorb shocks to future financing needs. A corollary of this prediction is that when the ability to pledge collateral improves, cash becomes less valuable, as firms can easily raise external finance to offset cash shortfalls, to finance investment opportunities, or both (Nikolov, Schmid and Steri, 2019). However, when uncertainty increases, firms may also become more reluctant to change their cash holdings in response to shocks because these shocks convey little information in an uncertain environment (Riddick and Whited, 2009). It is also unclear whether a relaxation of borrowing constraints makes cash and debt substitute. Firms may hedge against uncertainty related to the cost of external finance by raising funds when the cost is low and saving the proceeds in the form of liquid financial assets (Eisfeldt and Muir, 2016). Whether a relaxation of financial constraints in the presence of uncertainty leads firms to substitute internal for external finance remains an open empirical question.

The interplay of uncertainty and financial frictions also plays an important role in macroeconomic models featuring idiosyncratic risk shocks and incomplete financial markets.[1] In these models, financial frictions are the main mechanism through which uncertainty affects macroeconomic outcomes, as an increase in uncertainty tightens firms' borrowing capacity leading to lower investment. When this mechanism is at work, fluctuations in uncertainty are amplified by financial frictions, and government interventions aimed at improving access to external finance reduce firms' vulnerability to uncertainty shocks.

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[1] See for instance, Christiano, Motto, and Rostagno (2014), Gilchrist, Sim, and Zakrajsek (2014), Arellano, Bai and Kehoe (2019), Alfaro, Bloom, and Lin (2019).

In this paper, we show that better access to debt markets mitigates the effects of uncertainty on corporate financial and real policies. We establish this result using the staggered introduction of anti-recharacterization laws in U.S. states in the late 1990s and early 2000s. These laws strengthened lenders' ability to repossess collateral in bankruptcy. As a consequence, the value of firms' collateral from the perspective of debt-holders increased, improving firms' ability to borrow. Our main result is that firms that face high uncertainty and are incorporated in states adopting anti-recharacterization laws reduce cash holdings, increase payouts to shareholders and leverage, and invest more in intangible assets than firms headquartered in states without anti-recharacterization laws.

We perform two sets of tests. In the first one, we rely on cross-sectional differences in industry-level cash flow volatility and the staggered introduction of anti-recharacterization laws to study how uncertainty affects corporate policies in a difference-in-difference setting. According to Chapter 11 of the U.S. Bankruptcy Code, the collateral underlying secured lending is subject to automatic stay. This means that secured lenders can only repossess the collateral with a significant delay or not at all. Automatic stay, however, does not apply to assets owned by a firm's special purpose vehicles (SPVs), unless judges recharacterize assets transferred to an SPV as a loan instead of a true sale. To reduce the likelihood that secured lending through SPVs is recharacterized, and thus collateral is subject to automatic stay, a number of U.S. states introduced anti-recharacterization laws. These laws preserve the bankruptcy remote nature of SPVs, and thus contribute to improve firms' access to secured lending by giving firms the option to increase the value of pledged collateral to secured lenders through an SPV.

We find that after the passage of the laws, the average firm in an industry at the top quartile of the distribution of cash flow volatility reduces cash holdings by 8% and increases leverage by

7%. Firms affected by the laws also increase payouts. Changes in financial policies are accompanied by an increase in intangible assets for firms in industries more exposed to uncertainty and whose access to debt markets improves after the passage of the anti-recharacterization laws.[2] Moreover, and arguably as result of these changes in corporate policies, the cost of debt of treated firms in industries more exposed to uncertainty decreases, and their profitability increases. We also find that after the adoption of the laws firms that face a more uncertain environment are more likely to use SPVs. Importantly, firms that increase the use of SPVs are precisely those whose financial policies become less sensitive to uncertainty.

In our second set of tests, we compare the response of firms incorporated in states with and without anti-recharacterization laws to other, plausibly exogenous changes in uncertainty. Our first proxy for changes in uncertainty is based on geopolitical risk. Geopolitical risk is a narrower source of uncertainty than industry cash flow volatility but has the potential to affect the aggregate economic and political outlook and, as a result, firms' desire to invest and save. More importantly, changes in geopolitical risk have the advantage to be exogenous to firms' characteristics and firm-level policies. The second proxy exploits uncertainty implied by close U.S. gubernatorial elections. Gubernatorial elections provide a natural source of variation in state-level policies, including industry regulation, taxation, etc., which are likely to affect the business and economic environment of firms headquartered in those states. The main source of exogenous variation in this test comes from the fact that the timing of gubernatorial elections is determined by the law and not by local economic conditions. We find that when geopolitical risk increases, firms incorporated in states with anti-recharacterization laws do not increase cash holdings and do not decrease payouts

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[2] Treated firms that face high uncertainty also increase the proportion of receivables and inventories on their balance sheets, but do not invest more in fixed assets, suggesting weaker firms' incentives to hold assets that are easier to pledge after the passage of the laws

to shareholders and leverage as much as firms incorporated in other states. The financial policies of firms incorporated in states with anti-recharacterization laws are also less affected by higher state-level political uncertainty.

We finally study whether the decrease in firm's precautionary behavior in states with anti-recharacterization laws may be related to firms' ability to hedge against uncertainty shocks. Rampini and Viswanathan (2010) and Rampini, Sufi, and Viswanathan (2014) argue that more constrained firms engage less in risk management because of their limited resources and debt capacity. By relaxing financial constraints, anti-recharacterization laws may allow firms to hedge more. This in turn could weaken firms' precautionary motive. We measure firms' derivative hedging using parsed 10-K SEC filings and find evidence that firms hedge *less* after the adoption of anti-recharacterization laws, which is consistent with our main result that better access to debt markets weakens firms' precautionary motive.

In robustness tests, we also document that our main results do not reflect the presence of pre-trends—that is, treated firms changing cash holdings, payouts, and leverage before the adoption of anti-recharacterization laws—neither reflect the fact that firms that respond are only those that, based on observable ex-ante balance sheet characteristics, can be classified as financially constrained.

Taken together, our findings suggest that better access to debt markets decreases firms' precautionary behavior and shields firms from fluctuations in uncertainty, contributing to the deployment of cash and other internal resources to investment in intangible capital. Our results support the predictions of some dynamic models of firms' capital structure that firms maintain some degree of financial flexibility by substituting between cash and leverage. They also reinforce

the view that credit frictions magnify the contribution of uncertainty shocks on firms' real and financial decisions.

Our paper is related to several strands of literature. First, our paper contributes to the extant literature on corporate cash holdings.[3] This literature studies the independent role of uncertainty and financial constraints to explain the determinants of firms' cash holdings (Opler et al, 1999; Almeida, Campello and Weisbach, 2004; Bates, Kahle, and Stulz, 2009; Denis and Sibilkov, 2010; Duchin; 2010; Lins, Servaes and Tufano, 2010; McLean, 2011; Acharya, Davydenko and Strebulaev, 2012; Cunha and Pollet, 2020). It also relies on firm characteristics to measure both firms' ability to access capital markets and firms' uncertainty. Our analysis adds to this literature by providing a cleaner empirical setting in which both credit market frictions and uncertainty are unrelated to firms' policies and characteristics. In addition, we contribute to this literature by showing that laws that improve the collateral values of firms' assets are associated with a decrease in firms' cash holdings. To the extent that law changes affect firms' demand for insurance, our paper presents causal evidence supporting the precautionary motive of cash holdings.

Our results also support the hypothesis of a number of recent theoretical papers that the increasing use of intangible capital explains the rise in firms' cash holdings (Falato, Kadyrzhanova, Sim, and Steri 2019; Begenau and Palazzo, 2019). These papers emphasize the low pledgeability of intangible capital as the mechanism driving the rise in firms' precautionary cash holdings. Our results lend support to the argument that cash holdings and asset pleadgeability are related, but also suggest that when firms' access to debt financing improves, cash holdings may fall even if investment in intangible assets increases.

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[3] Prominent explanations of the rise in corporate cash holdings include the role of firm's intangible assets (Falato, Kadyrzhanova, Sim, and Steri, 2019), the opportunity cost of holding cash (Boileau and Moyen, 2016), the nature of new public firms (Graham and Leary, 2018; Begenau and Palazzo, 2019), the repatriation costs of cash held by foreign subsidiaries (Faulkender, Hankins, and Petersen, 2018), and agency costs (Nikolov and Whited, 2014).

Second, this paper contributes to a growing literature on the effects of uncertainty on investment (Leahy and Whited, 1996; Bloom, 2009; Bloom, Bond, and Van Reenen, 2007). Recent work by Alfaro, Bloom and Lin (2018) shows that adding financial frictions to the classical model of stochastic-volatility uncertainty shocks doubles the negative impact of uncertainty shocks on investment.[4] We document that a policy that facilitates access to debt markets leads firms that face a more uncertain environment to increase leverage; moreover, this policy ends up influencing other firms' policies—payouts and cash—and firms' asset composition.

To the best of our knowledge, our paper is the first to highlight that an improvement in creditor rights mitigates the effects of uncertainty on corporate decisions. In this respect, we also contribute to a large literature exploring how creditor rights affect credit markets and firm behavior. Most of this literature highlights that strong creditor rights increase the supply of credit and facilitate firms' access to credit (Djankov, McLiesh, and Shleifer, 2007). This literature has also shown that the strengthening of creditor rights may discourage the use of secured debt due to costly asset liquidation in case of default (Vig, 2013). Our paper contributes to this literature by suggesting a novel ex ante benefit of creditor rights: Stronger protection of creditor rights enhances firms' debt capacity and helps mitigate the effects of uncertainty on firms' behavior. In contrast to Vig (2013), we find no evidence that stronger creditor rights discourage the use of secured debt. The reason is that anti-recharacterization laws strengthen creditor rights when firms borrow through SPVs, but firms maintain the option not to borrow through bankruptcy-remote vehicles, in which case the rights of secured creditors are not strengthened.

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[4] An early attempt to explore this question empirically is in Ghosal and Loungani (2000). They use industry level data and compare industries with small and large firms to provide evidence that investment is more sensitive to uncertainty shocks in industries with small firms, which are usually thought to face tighter financial constraints.

By focusing on the role that creditor rights play in mitigating firms' exposure to uncertainty shocks, our paper differs from other studies that also exploit the adoption of anti-recharacterization laws as a natural experiment. For example, Mann (2018) shows that court decisions not to recharacterize assets enhance patenting firms' access to credit and innovation. Li, Whited, and Wu (2016) use the staggered introduction of anti-recharacterization laws to explain the relative importance of financial frictions and the tax benefits of debt for the capital structure of firms.[5]

The rest of the paper proceeds as follows. Section 1 discusses the anti-recharacterization laws and Section 2 describes the data. The empirical methodology is discussed in Section 3, while Section 4 presents our main results. Section 5 introduces exogenous measures of uncertainty and Section 6 describes the real effects of the reforms and provides further evidence in favor of the causal mechanism. Section 7 evaluates the merit of alternative explanations and Section 8 concludes.

1. State-level Anti-Recharacterization Laws and Collateral Pledgeability

According to the US bankruptcy code, once a firm files for Chapter 11, secured creditors are unable to seize any collateral because all firms' assets, including pledged collateral, are subject to automatic stay. Automatic stay delays secured lenders' ability to seize the pledged collateral and ultimately decreases the value of collateral.

Automatic stay, however, does not apply to assets owned by a firm's special purpose vehicles (SPVs). For this reason, firms may sell collateral to a subsidiary company, the SPV, and obtain financing through the SPV instead of borrowing directly from the lender. Borrowing

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[5] Relatedly, Chu (2019) shows that anti-recharacterization laws affect corporate leasing policies and Ersahin (2018) shows that anti-recharacterization laws increase firms' productivity.

through an SPV is likely to lower a firm's cost of capital, as the SPV is bankruptcy-remote and therefore expected bankruptcy costs are lower (Gorton and Souleles, 2007).

The extent to which SPVs may shield creditors from bankruptcy costs depends, however, on whether judges recharacterize an asset transferred to the SPV as a loan, instead of a true sale. If this recharacterization takes place, a lender becomes a secured creditor of the firm, instead of the SPV. Therefore, even secured lending through SPVs may be subject to automatic stay. While the automatic stay and the recharacterization of assets transferred to SPVs aim to favor business continuation, this provision hampers firms' access to credit by decreasing the value of pledged collateral to secured lenders.

To enhance creditor protection, a number of states passed "anti-recharacterization" laws, which limit judges' ability to recharacterize the collateral pledged through SPVs as an asset of the company that files for Chapter 11. While conflicts between federal and state laws may arise, anti-recharacterization laws reduce the likelihood that automatic stay on assets applies to borrowing through SPVs, contributing to increase the value of pledged collateral and the pledgeability of a wider range of assets, such as receivables or patents. For these reasons, anti-recharacterization laws improve access to debt financing for all firms, even those that do not currently use SPVs but may do so in the future.

It is important to note, however, that the anti-recharacterization laws do not eliminate the automatic stay on assets in case of bankruptcy. They only give firms the option to opt out of automatic stay by transferring some assets and issuing some debt through SPVs.

The following states introduced anti-recharacterization laws in a staggered manner: Louisiana and Texas in 1997, Alabama in 2001, Delaware in 2002, South Dakota in 2003, Virginia

in 2004, and Nevada in 2005.[6] The introduction of these laws was mostly driven by the lobbying efforts of the banking and especially the securitization industries (Kettering, 2008). They can therefore be considered exogenous to non-financial firms.[7] While in 2003 a court ignored the anti-recharacterization statute of Texas, introducing some uncertainty as to whether state-level anti-recharacterization laws prevail over federal standards (see Reaves Brokerage Company Inc. v. Sunbelt Fruit & Vegetable Company, Inc), anti-recharacterization laws are typically enforced, increasing the likelihood that creditors will be able to repossess assets in bankruptcy.[8]

In what follows, we use these considerations to study how the passage of anti-recharacterization laws affects corporate behavior and performance.

2. Data Sources and Main Variables

2.1 Sample

We construct our sample as follows. We begin with all publicly traded U.S. firms in CRSP and COMPUSTAT and exclude financial firms (SIC in 6000 through 6999), regulated utilities (SIC in 4900 through 4999), and government entities (SIC over 9000). We also require our sample of firms to have available information on the state of incorporation. We include only firms that are incorporated in the 50 U.S. states plus the District of Columbia. Given that anti-recharacterization laws were adopted by different states between 1997 and 2005, we restrict the sample period to 1992-2010 to include five years prior to the first adoption and five years after the last adoption.

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[6] North Carolina and Ohio also adopted anti-recharacterization laws, but these apply only to sales made by insured financial institutions.

[7] To discourage forum shopping, the transfer of assets is typically governed by the state law of the parent company (Kettering, 2008).

[8] The bankruptcy reform of 2005 increased protection for derivative counterparties of firms in Chapter 11. Since the reform has nationwide implications, any of its effects will be captured by our control sample. It cannot therefore affect our findings. We also show that our results are robust if we consider the sample up to 2002.

2.2 Measuring Uncertainty

Our objective is to study whether an improvement in creditor protection affects to a larger extent firms operating in a more uncertain environment.[9]

Our first proxy for uncertainty builds on Bloom (2009), Bates, Kahle, and Stulz (2009) and Jurado, Ludvigson, and Ng (2015) and is based on the dispersion of accounting measures of firm-level performance. Specifically, we follow Bates, Kahle, and Stulz (2009) and measure uncertainty with the median cash flow volatility in a firm's industry. For each firm-year, we compute the standard deviation of cash flow to assets for the previous 10 years.[10] We then take the median of the standard deviation of the firms' cash flow volatilities in each year across two-digit SIC codes. We consider two-digit industries to mitigate concerns that firm-level uncertainty may depend on a firm's ability to access debt markets. This proxy for uncertainty, which we refer to as *CashFlowVol,* captures the idea that firms in industries with uncertain cash flow are more likely to suffer cash shortfalls. These firms should be more likely to hoard cash and reduce payouts and leverage.

Our second proxy for uncertainty is based on industries' exposure to geopolitical risk, which has the noteworthy feature of being orthogonal to corporate policies and aggregate economic conditions. Geopolitical risk refers to the potential occurrence of military and diplomatic conflicts as well as terroristic acts. While these scenarios are only one of the many sources of uncertainty for firm-level cash flow volatility, they are plausibly exogenous to corporate policies. We rely on the index of geopolitical risk developed by Caldara and Iacoviello (2019), which is based on an automated text-search of national and international newspapers and is constructed by

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[9] As it is common in the literature (see, e.g., Bloom, 2014), our proxies do not distinguish between risk and uncertainty. Risk usually refers to the risk of a known probability distribution, while (Knightian) uncertainty refers to economic agents' inability to forecast the likelihood of future events.
[10] To compute this measure, we require that a firm has at least three years of data.

counting the number of articles that cover topics related to military-related tensions, coups, wars and terrorist threats.

To estimate an industry's exposure to geopolitical risk, we estimate the beta of the industry's monthly stock returns to the change in the index of geopolitical risk, using a 60-month rolling regression and controlling for the three Fama-French factors. Industries are defined at the Fama-French 48 industry level. The geopolitical uncertainty faced by a firm in a given industry is measured by the industry beta times the change in the index of geopolitical risk. Since the industry-level exposure varies little over time, changes in our measure of industry-level geopolitical uncertainty are primarily driven by spikes in the index of geopolitical risk. In the empirical analysis, since we work with a yearly panel, we average this variable over 12 months.

Our third measure is based on state-level political uncertainty due to close gubernatorial elections. Uncertainty related to local political elections is expected to affect firms headquartered in states with an upcoming election because changes in political leadership are likely to affect the local business environment and firms' economic prospects. One important advantage of using this measure of uncertainty is that the timing of gubernatorial elections is determined by electoral laws and not by local economic conditions. Following Jens (2017), we measure political uncertainty based on the outcome of upcoming gubernatorial elections taking place in the firm's headquarters state, which is typically the state where most of a firm's economic activity takes place. As in Jens (2017), and because political uncertainty is typically limited to the months immediately preceding elections, we define political uncertainty to be high in the quarter immediately preceding a gubernatorial election if the difference between the proportion of votes for the winning party and the runner up party ends up being in the bottom tercile of its distribution. This measure reflects the

"closeness" of election outcomes, with higher values indicating close elections, or political outcomes that are difficult to predict ex ante.

2.3 Main Outcome Variables

We focus on several outcome variables. Our first proxy for firms' precautionary savings is firms' cash holdings (*Cash*), defined as cash and cash equivalent securities over lagged total assets. Our second proxy is payouts to shareholders. If anti-recharacterization laws mitigate firms' precautionary behavior, we expect, ceteris paribus, an increase in firms' willingness to increase payouts to shareholders. We measure payouts (*Payout*) as the sum of cash dividends and repurchases, scaled by total assets.

We also study the effects of anti-recharacterization laws on firms' leverage, calculated as the ratio of total long-term and short-term debt over total assets (*Leverage*). Firms' leverage may decrease, increase or remain unchanged if firms can borrow more off-balance sheet or anticipate easier access to off-balance sheet borrowing in the future.

Since anti-recharacterization laws improve lenders' ability to pledge intangible assets, the laws may also strengthen firms' incentives to invest in innovation. Therefore, we look at firms' investment in intangible capital. We focus on two broad categories of intangible capital. First, following Eisfeldt and Papanikolau (2013) and Falato et al. (2013), we compute the stock of R&D expenses relative to total assets (*RD (stock)*), by cumulating annual R&D expenses with a depreciation rate of 15%. Second, we compute a measure of total intangible assets (*Intangibles (stock)*) by adding up *R&D stock*, *SG&A stock*, and the stock of computerized information. The *SG&A stock* is obtained by cumulating firms' selling, general, and administrative (SG&A) expenses using the perpetual inventory method with a depreciation rate of 20% and dividing by

total assets. Similarly, we construct the stock of computerized information and software by applying the perpetual inventory method with a depreciation rate of 31% as in the BEA data.[11]

Finally, we evaluate firm performance using the firm's return on assets (ROA). In the empirical analysis, we control for a number of firm characteristics, which we summarize in Table 1. We winsorize all continuous variables at the 1st and 99th percentiles and restrict leverage between 0 and 1. Detailed variable definitions are provided in the Data Appendix.

We also use data on firms' usage of SPV, which we obtain from Lemmon, Liu, Mao, and Nini (2014). These data are collected by reading the 10-Ks filings of all non-financial companies that rely on securitization for meeting their financing needs. In addition, we parse information in firms' 10-K filings to the SEC, available through EDGAR, to obtain information of firms' use of hedging instruments. In particular, we measure the use of hedging instruments (derivative, swap, futures, forward contract, options, etc.) searching in firms' 10K filings information on the use of financial instruments for hedging against risk stemming from changes in commodity and energy prices, interest rates, exchange rates, and security prices.

3. Empirical Strategy

We start by studying the response of firms' financial policies to the passage of anti-recharacterization laws by estimating a difference-in-difference regression:

$$y_{f,i,s,t} = \alpha_1 \times D_{s,t} + f_f + \gamma_{i,t} + \boldsymbol{Bx_{f,t}} + \epsilon_{f,i,s,t},$$

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[11] Since these expenses are not reported at the firm level, we use the annual Fixed Reproducible Tangible Wealth (FRTW) data from Bureau of Economic Analysis (BEA) at the industry level. We construct a multiple as the ratio of the stock of computerized information and software and the industry's tangible capital stock and apply this multiple to each firm's tangible capital stock (PPE) to derive a firm-level stock of computerized information and software. We scale the latter by total assets, as we do for the other measures of intangible capital.

where $y_{f,i,s,t}$ is a corporate policy of firm f in industry i incorporated in state s during year t. Our variable of interest is $D_{s,t}$, which is defined as a dummy variable that takes value one if firm f is incorporated in state s with an anti-recharacterization law introduced at t or earlier, and zero otherwise. Specifically, $D_{s,t}$ equals one for firms incorporated in Texas or Louisiana after 1997, in Alabama after 2001, in Delaware after 2002, in South Dakota after 2003, in Virginia after 2004, and in Nevada after 2005. The vectors f_f and $\gamma_{i,t}$ are firm and industry-year fixed effects, respectively. The firm fixed effects subsume the state of incorporation. We define industries at the one-digit SIC code level. The vector $x_{f,t}$ includes firm-level controls, which include important determinants of corporate leverage, cash holdings, and payouts, such as firm's cash flow, net working capital, market capitalization, market to book ratio, the acquisition values over total sales and a dummy capturing whether the firm does any R&D.[12]

Considering the timing of the law adoption, we restrict the sample period to 1992-2010. Given the staggered introduction of the laws, the control sample includes not only firms incorporated in states that did not introduce the laws, but also firms in states that will eventually pass the laws before the laws are actually passed.

Our main tests estimate the effects of the laws on firms in industries with different uncertainty levels, using the following model:

$$y_{f,i,s,t} = \alpha_1 \times D_{s,t} + \alpha_2 \times uncertainty_{i,t} \times D_{s,t} + \alpha_3 \times uncertainty_{i,t} + f_f + \gamma_{i,t} + Bx_{f,t} + \epsilon_{f,i,s,t},$$

in which $uncertainty_{i,t}$ is either the median cash flow volatility in industry i prior to year t, industry-level geopolitical uncertainty, or state-level political uncertainty. The interaction term allows us to capture how firms' response to uncertainty varies after the passage of the laws. As law changes occur at the state level, we cluster standard errors by state.

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[12] Our estimates are qualitatively invariant if we exclude these controls from the regressions.

4. Anti-Recharacterization Laws and Financial Policies

4.1 Preliminary Evidence

Table 2 reports difference-in-differences estimates of the response of firms' financial policies to the passage of anti-recharacterization laws. Column 1 shows that the passage of anti-recharaterizations laws is associated with an increase in firms' leverage by roughly 5%, even though treated firms can now borrow more off-balance sheet by pledging collateral through SPVs. What is more, columns 2 and 3 show that after the passage of the laws, the average firms operating in anti-recharacterization law states reduce cash holdings by 5% (0.01/0.22) and increases total payouts to shareholders by 2.3 percentage points relative to firms that operate in other jurisdictions. These findings are consistent with the view that, by strengthening creditor rights, the passage of anti-recharacterization laws improves firms' ability to borrow, which in turn weakens their incentives to hold extra cash reserves or to conserve internal resources by limiting payouts to shareholders. Taken together, the reduction in firms' cash holdings, and the increase in payouts and leverage unequivocally suggest that after the adoption of anti-recharacterization laws, firms' precautionary behavior weakens, likely because firms expect to have better access to capital markets after the introduction of the laws.

Such an interpretation is warranted if the corporate policies of treated and control firms have common trends before the passage of the anti-recharacterization laws. To evaluate whether this identifying assumption holds, we re-estimate the equations in Table 2 substituting the dummy *Law* with dichotomic variables indicating the year relative to the adoption of anti-recharacterization laws in a given state. Figure 1 reports the estimates. We observe no differences in corporate financial policies in each of the three years preceding the adoption of the laws. Only

in the year of the law adoption and afterwards we observe a drop in cash and an increase in leverage and payouts to shareholders.

4.2 Effect of Anti-recharacterization Laws and Uncertainty

The main objective of our analysis is to test whether better access to debt markets mitigates the effects of uncertainty on corporate policies. To this end, we study how the response of corporate decisions to uncertainty differs between treated and control firms. If the anti-recharacterization laws improve firms' ability to tap the debt market, thus decreasing the risk of facing future financial constraints, firms that face high uncertainty should reduce cash holdings, and increase payouts and leverage after the passage of the laws. In contrast, if uncertainty is merely a real shock, there should not be any differential response to the passage of the laws for firms in industries with different levels of uncertainty.

Table 3 presents the results using our benchmark measure of uncertainty, which is based on the median cash flow volatility in a firm's industry. Following Bates, Kahle, and Stulz (2009), this standard measure of uncertainty captures the idea that firms in industries with uncertain cash flow are more likely to suffer cash shortfalls. As shown in Table 3, there are significant changes in financial policies after the passage of anti-recharacterization laws for firms that face relatively high uncertainty. Importantly, the cross-sectional effects of the laws appear to dominate the average effects suggesting that firms in environments with low uncertainty are largely unaffected.[13]

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[13] In these tests, interpreting the direct effect of uncertainty is difficult because our regressions include the interaction of year and one-digit SIC code fixed effects, and our proxy of uncertainty varies over time at the two-digit SIC code industries level.

In column 1 of Table 3, we estimate that the adoption of anti-recharacterization laws leads firms to increase leverage to a larger extent if these firms are in industries with higher uncertainty. In particular, firms in the top quartile of the distribution of cash flow volatility increase leverage by 7% ((0.39×0.09-0.02)/0.22).

More importantly, the improvement in creditor rights not only affects leverage but spillovers to firms' saving behavior. In columns 2 and 3, respectively, we estimate that cash holdings decline and payouts increase after the passage of the laws, especially for firms that operate in industries with higher cash flow volatility. Firms decrease cash holdings by about 8% ((-0.36×0.09 + 0.015)/0.22) if they operate in industries with uncertainty in the top quartile of the distribution of cash flow volatility. Importantly, the direct effect of the passage of the laws is positive, indicating that the cross-sectional differences we highlight are important: Without uncertainty, stronger creditor rights do not reduce firms' precautionary behavior.

In columns 4 to 6 of Table 3, we estimate the same empirical models as in columns 1 to 3, but we include interactions of three-digit SIC codes and year fixed effects to evaluate whether unobservable time-varying industry shocks may be responsible for our benchmark results. The inclusion of these fixed effects, however, appears to have no material effect on the estimates of our coefficients of interest. In all cases, the estimates of the interaction terms of industry cash flow volatility and the dummy variable associated to the passage of the law are roughly unchanged.

The results in this table suggest that the effects of uncertainty on firms' financial policies is muted after the passage of the anti-recharacterization laws. In other words, the precautionary motive of firms that face a more uncertain environment is weakened when firms' access to debt market improves. The next subsections present important robustness tests supporting the interpretation of these results.

4.3 Robustness

A crucial assumption in our analysis is that the passage of the anti-recharacterization laws in a given state enhanced the pledgeability of firm's assets in those jurisdictions. One concern related to this interpretation is that the 2003 *Reaves Brokerage Company Inc. v. Sunbelt Fruit & Vegetable Company, Inc.* case weakened the effects of anti-recharacterization laws on corporate behavior. In this judicial case, a court ignored the anti-recharacterization statute of Texas and used a federal standard to recharacterize as a loan the transfer of assets to an SPV by a firm incorporated in Texas.

This court decision introduced some uncertainty as to whether state-level anti-recharacterization laws prevail over federal standards in case of bankruptcy. Our tests rely on the assumption that even if the recharacterization of the assets pledged as collateral may occur with some probability, anti-recharacterization laws increase the probability that creditors will be able to repossess the asset in case of bankruptcy.

To check the possibility that anti-recharacterization laws were re-interpreted after the 2003 case, Table 4 presents our main results using data through 2002. As shown, the estimates on this smaller sample period are similar to our benchmark results in Table 3, validating our empirical strategy and the interpretation of our main findings.

We also consider the possibility that other shocks, including other state-laws introduced during the 1992-2010 period may affect our results. In contrast to the anti-recharacterization laws, which are based on the state of incorporation, most state laws typically affect firm operations based on the state of the headquarters. For this reason, Table 5 controls for asymmetric shocks affecting

firms headquartered in different states by including interactions of headquarters state and year fixed effects. As shown, our results are qualitatively and quantitatively unchanged.[14]

Table 6 presents the results of yet another robustness test. It assesses whether our results are driven by the distribution of firms' states of incorporation. Most treated companies in our sample are incorporated in Delaware, mostly because in this state the court system is specialized in corporate bankruptcies. While this may induce selection in the firms that incorporate in Delaware, any heterogeneity between Delaware and non-Delaware firms is differenced away by the inclusion of firm fixed effects. Panel A of Table 6 presents the results of a test in which Delaware firms are the only treated firms. This test does not exploit the staggered nature of the laws and thus helps mitigate the concern that a staggered differences-in-differences design may suffer from the problem that treated units end up serving as controls, possibly biasing our estimates (Borusyak and Jaravel, 2017). It is reassuring that none of our main results are affected by the use of this alternative test.

To provide further evidence that our results are not driven by a firm's state of incorporation, Panel B of Table 6 presents the results of an alternative test in which only firms incorporated outside Delaware are included in the treatment group.[15] As shown, the results are fully consistent with our earlier findings.

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[14] We also interacted cash flow volatility with state level laws that affected the sample firms during our sample period, such as state-level banking deregulation (Rice and Strahan, 2010) and state-level laws enforcing non-compete agreements (Garmaise, 2009). We also control for the interaction between cash flow volatility and state-level corporate and personal income taxes. The inclusion of these controls leaves our results unaffected.

[15] Given the smaller sample of treated firms after dropping Delaware, in this test, we match treated companies to at most five companies in the same industry in states that did not pass the law and that have similar cash flow volatility using propensity scores.

5. Alternative Measures of Uncertainty

This section assesses the robustness of our main results to alternative sources of uncertainty. In particular, we evaluate how the financial policies of firms incorporated in different jurisdictions change in response to heightened geopolitical risk or state-level political risk. While these two forms of uncertainty capture a distinct source of risk than industry cash flow volatility, they have the noteworthy property of being reliably exogenous to corporate policies and economic conditions more generally. In addition, they have the potential to affect the aggregate or state-level economic and political outlook and thus firms' desire to invest and save.

5.1 Geopolitical Uncertainty

Panel A of Table 7 presents the results using geopolitical risk as source of uncertainty. Consistent with the estimates in Table 3, Panel A of Table 7 shows that firms that face an increase in geopolitical risk and are incorporated in states with anti-recharacterization laws decrease leverage and payouts and increase cash holdings less than firms in states without anti-recharacterization laws. The magnitude of the economic effects of the laws are also comparable to those presented in Table 3. Specifically, when geopolitical risk is in the top quartile of its distribution, firms incorporated in states that have adopted anti-recharacterization laws have 9% (($0.04 \times 0.015 + 0.02)/0.22$) more leverage and hold 9% (($-0.04 \times 0.015 - 0.02)/0.22$) less cash than firms incorporated in states without anti-recharacterization laws.

5.2 Political Uncertainty

Panel B of Table 7 presents additional results based on changes in firm's uncertainty related to close U.S. gubernatorial elections. We expect firms incorporated in states with anti-

recharacterization laws to be less affected by political uncertainty associated with close elections. As discussed in Section 2, gubernatorial elections provide a natural source of variation in state-level policies, including industry regulation, taxation etc., which are likely to affect the business and economic environment of firms headquartered in those states. However, since this source of political uncertainty is limited over time, firm may not respond swiftly on decisions that involve large fixed costs, such as issuing new debt.

Following Jens (2017), in these tests we use quarterly data and limit the sample to election years. Close elections are characterized by high political uncertainty because the color of the administration and its policies are harder to predict. We assume that these high levels of uncertainty characterize quarters preceding gubernatorial elections, in which the difference between the proportion of votes for the winning party and the runner up party ends up being in the bottom tercile of its distribution. We then evaluate the differential response of firms in quarters preceding close gubernatorial elections with the triple interaction term *Close Election×Q3×Law*. Thus, our regression model compares the financial policies of firms in states with close elections relative to those of firms in states with non-close elections, and, more importantly for our purposes, compares the effects of close elections on the financial policies of firms incorporated in states with and without anti-recharacterization laws.[16]

Panel B of Table 6 shows that firms incorporated in states with anti-recharacterization laws maintain 1.3 percentage points lower cash holdings and 0.6 percentage points higher payouts than firms incorporated in states without anti-recharacterization laws during quarters preceding close

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[16] The lower order interactions terms in our regression control for the fact that firms in states with close elections may be systematically different, or financial policies may change for all firms in the quarter before the elections. The regression model also controls for differences between firms headquartered in states with anti-recharacterizations laws in the quarter before the elections or when close elections occur.

gubernatorial elections. As expected, given that the source of uncertainty considered in this section is not persistent over time, we do not find statistically significant differences for leverage.

Taken together, the evidence collected in this subsection for the differential response of firms to changes in geopolitical and state-level political risk—which are important sources of risk exogenous to firms' characteristics and policies—support our earlier findings that firms respond to uncertainty shocks by reducing precautionary saving after the passage of the anti-recharaterization laws.

6. Real Effects of Anti-Recharacterization Laws and Economic Mechanisms

6.1 Effects on Firm Investment and Performance

In this section, we ask whether changes in financial policies following the adoption of anti-characterization laws have any real effects. This analysis allows us to infer whether strengthening creditor rights and thus easing access to debt markets reduces the negative effects of uncertainty on the real economy.

Table 8 presents estimates of the effect of the laws on firm profitability and asset composition using our benchmark measure of uncertainty based on industry-level cash flow volatility. Column 1 shows that firms' performance in industries with higher uncertainty improves after the passage of anti-recharacterization laws. The profitability of a treated firm in an industry with high (i.e., top quartile) cash-flow uncertainty increases by 1.4 percentage points ($0.27 \times 0.09 - 0.01$) after the adoption of anti-recharacterization laws—a large increment considering that the median ROA of firms in the sample is 0.03.

The rest of Table 8 sheds light on what may explain this improvement in profitability. In columns 2 and 3, we estimate that firms that face higher uncertainty appear to increase investment

in R&D and intangible assets. Again, the effects are stronger for firms in high-uncertainty industries. For instance, in column 2 and column 3, respectively, a firm that face high uncertainty (top quartile) increases its R&D stock by 29% (($1.12\times0.09-0.026)/0.26$) and intangible assets by 11% relative to the average firm.

As shown in column 4, however, tangible assets do not change. Rather, firms increase the proportions of receivables and inventories on their balance sheets (columns 5 and 6). Several mechanisms may help explain why fixed investment does not respond to the passage of anti-recharacterization laws. First, while these laws increased the collateral value of all assets, the liquidation value of fixed assets tends to be less sensitive to changes in creditor rights than the liquidation value of other assets, such as inventories and account receivables (Degryse, Iannidou, Liberti and Sturgess, 2020). Second, it is possible that before the passage of the laws, firms facing high uncertainty had invested in fixed assets, rather than in intangible capital (SG&A, R&D etc.), to secure their access to debt markets. As the laws increased the collateral value of all assets, it is possible that firms responded by tilting the composition of their assets towards more intangible investment. Finally, capital investment is often indivisible and involves significant adjustment costs (Cooper and Haltiwanger, 2006). Thus, at the margin, after the passage of the laws, firms may have found it optimal to adjust expenses in intangibles, inventories and receivables rather than in tangible assets.

The evidence in Table 8, together with the one in Table 3, suggests that stronger creditor rights not only affect firms' financial policies but also have real effects on firms operating in highly uncertain industries. Furthermore, these laws stimulate investment in intangible assets by allowing firms to pledge a wider range of collateral. This in turn is associated with a significant

improvement in firms' profitability, as intangible investment is typically more productive than tangible investment (Eisfeldt and Papanikolaou, 2013).

6.2 Anti-recharacterization Laws and SPV Use

Our interpretation of the results presented so far is that firms' access to debt markets improves after the passage of the laws because it becomes easier to pledge assets as collateral through SPVs. Accordingly, firms incorporated in states with anti-recharacterization laws should be more likely to use special purpose vehicles (SPVs). At the same time, firms that do not use SPVs should still benefit from the passage of the laws, as anti-recharacterization laws increase the likelihood that firms may pledge collateral through SPVs in the future.

Table 9 provides evidence consistent with this interpretation. Column 1 in Panel A reports estimates of the likelihood that a firm starts reporting at least one SPV in its 10K filings to the SEC. Unconditionally, we find no statistically significant effect of the laws. However, in column 2, firms in industries that are in the top quartile for cash flow volatility are 0.2 percentage points (0.025×0.09) more likely to start using an SPV after the passage of the laws, a 52% increase in the probability relative to the sample average. These results are consistent with the view that SPVs may help firms mitigate uncertainty shocks through additional borrowing.

In Panel B of Table 9, we ask whether the response of firms' financial policies to uncertainty shocks after the adoption of anti-recharacterization laws is related to the likelihood of using SPVs. Following Lemmon, Liu and Nini (2014), we predict the likelihood that firms use SPVs based on observable characteristics, such as market capitalization, market-to-book ratio, cash flow, working capital, acquisition, and R&D expenses. Since firm policies may be impacted by the passage of the anti-recharacterization laws, we use only observations in the treated sample

before the passage of the laws and in the control sample to predict the probability that a firm uses SPVs. We then test whether firms that are more likely to use SPVs are also more responsive to the passage of the anti-recharacterization laws. To do so, we define a dummy variable, *High SPV*, that is equal to one if a firm's predicted likelihood of using SPVs exceeds the sample median.

As shown in Panel B, the coefficient on the triple interaction term *High SPV*Law*CashFlowVol* suggests that the passage of the laws has larger effects on leverage, cash holdings and payout of firms that face higher uncertainty and are more likely to use SPVs than for firms that are less likely to use SPVs, consistent with the conjecture that the anti-recharacterization laws improve access to debt market, and ultimately reduce firms' precautionary behavior.

6.3 *Anti-Recharacterization Laws and the Cost of Debt*

An important finding of the law and finance literature is that stronger creditor rights typically reduce borrowing costs thus relaxing financial constraints. So far, we have documented that anti-recharacterization laws benefit firms that face more uncertain environments by favoring access to debt markets. In this subsection we evaluate whether the laws also affected the cost of borrowing, using data on interest rates of new syndicated loans and new bond issues.[17] Panels A and B in Table 10 present the results for loans and bonds, respectively.

The estimates in column 2 of Panel A show that firms in industries with cash flow volatility in the top quartile of its cross-sectional distribution have 4.75 (-52.77×0.09) basis points lower loan spread after the passage of the laws. This effect is equivalent to a 3% decline relative to the sample average loan spread (174bps). Similarly, the estimates in column 2 of Panel B indicate that firms with cash flow volatility in the top quartile experience a decrease in loan spread of 15.4 (-

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[17] For syndicated loans we use data from Dealscan and for bond issuance we rely on data from Mergent FISD.

171.3×0.09) basis points following the passage to the laws, which amounts to a decline of bond spread at issuance of 7% relative to the average spread in the sample (208 bps).

The decrease in the cost of debt documented in Table 10 must be interpreted as stemming not only from a lower cost of debt issued through SPVs—thanks to the bankruptcy remoteness guaranteed by the laws—but also from the fact that after the adoption of the laws firms can move assets off balance sheets and tap different markets to raise new debt. These findings are consistent with the evidence presented so far and support the interpretation that firms facing a more uncertain environment borrow more after the passage of the laws, partly due to a decline in borrowing costs.

7. Alternative Explanations

7.1 Anti-Recharacterization Laws and Hedging

Rampini and Viswanathan (2010) and Rampini, Sufi, and Viswanathan (2014) argue that financially constrained firms are less likely to hedge risk through risk management, as these firms tend to exhaust their debt capacity, rather than conserve it, to take advantage of future investment opportunities. Since anti-recharacterization laws tend to relax firms' financial constraints, it is possible that firms hedge more, thus reducing their exposure to uncertainty shocks, after the passage of the laws.

In Table 11, we test whether the hedging motive explains the thrust of the evidence on firm's financial policies presented so far. We regress an indicator for whether firms report the use of derivatives in their annual filings to the SEC on the interaction between the passage of anti-recharacterization laws and two of our measures of uncertainty: industry cash flow volatility and geopolitical risk.[18] Column 1 shows that firms incorporated in states that adopt anti-

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[18] We do not consider uncertainty due to for gubernatorial elections, as firms are unlikely to hedge this form of risk with derivatives.

recharacterization laws appear more likely to engage in hedging activities, supporting the argument of Rampini and Viswanathan (2010). However, the estimated coefficients for the interaction term *Law×Uncertainty* suggest that firms facing a more uncertain environment do not increase hedging to a greater extent than other firms after the passage of anti-recharacterization laws. If anything, there is evidence of the contrary, possibly because these firms were already hedging before the passage of the laws. In column 2, firms also do not appear to hedge against geopolitical uncertainty, suggesting that firms cannot insure this form of risk. Also, firms appear to hedge to a lower extent after the adoption of the laws.

This evidence suggests that our main findings are unlikely to be driven by firms' enhanced ability to hedge risk after the adoption of anti-recharacterization laws. The reduced impact of uncertainty shocks on corporate policies appears instead to be driven by firms' improved ability to access debt markets.

7.2 Uncertainty or Financial Constraints?

Table 12 presents our last robustness test. It evaluates the possibility that our proxies for industry level uncertainty simply capture firms' ability to raise external finance. For this purpose, we rely on the Hadlock and Pierce (2010) index (*HP*), which uses a combination of total assets and firm age to measure firms' financial constraints. In particular, we evaluate how firms' financial policies change after the passage of the anti-recharacterization laws once we control for the possibility that firms are unable to raise external finance, which is captured by the inclusion of an interaction term between *Law* and the *HP* index of firms' financial constraints. As shown in Table 12, after the inclusion of this additional control, the coefficient on the main interaction of *Law* and *CashFlowVol* is qualitatively unchanged compared to the baseline results in Table 3. While it is

notoriously difficult to identify financially constrained firms (Farre-Mensa and Ljungqvist, 2016), the evidence in this table suggests that our results do not seem to be driven by the differential responses of firms that, based on observable ex-ante characteristics, are relatively more constrained in their ability to raise external finance.

8. Conclusions

We highlight a novel effect of strong creditor rights for firms that face high uncertainty. By exploiting the staggered introduction of anti-recharaterization laws in U.S. states, we find that as firms are given the option to improve creditors' ability to repossess collateral in bankruptcy, their access to debt financing improves and firms engage in less precautionary behavior. With the option to strengthen creditor rights, firms have weaker incentives to hoard cash or reduce payouts to shareholders and leverage, and have stronger incentives to invest in intangible capital. Furthermore, these effects are more pronounced for firms that are exposed to a more uncertain environment.

Our evidence has important policy implications. It suggests that strengthening creditor rights makes firms more resilient to uncertainty shocks and fosters investment in intangible capital and innovation. While precautionary behavior enables firms to forestall distress and default, it prevents cash and other internal resources to be deployed for productive investment. Accordingly, policy interventions that improve firms' access to capital markets have the potential to shield firms' policies and investment from the adverse effects of fluctuations in uncertainty.

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Data Appendix—Variable Definitions

Acquisition: Acquisition value (AQC) over total sales (SALE)

Bond Size: The log of the face value for a corporate bond issue

Bond Maturity: The number of years to maturity of a corporate bond

Bond Yield Spread: The difference between a firm's bond issuance yield over the treasury yield at the same maturity range.

Cash: Cash and cash equivalent securities (CHE) over lagged total assets (AT)

Cash Flow: Operating cash flow (IB + DP) over total assets (AT)

CashFlowVol: The median level of cash flow volatility in a two-digit SIC industry. A firm's cash flow volatility is calculated as the standard deviation of cash flow over the past 10 years. At least three years of observations are required. Cash flow is measured as in Bates et al. (2009): earnings after interest, dividends, and taxes, divided by total assets ((EBIT-XINT-TXT-DVC)/AT).

Close Election: A dummy variable that equals one if a gubernatorial election's vote gap ranks at the bottom tercile of the sample, and zero otherwise. Vote gap is the difference in vote share between the winning party and the runner-up party. The vote share is calculated as the number of votes for each party divided by the total votes in an election.

Coupon Rate: The coupon rate of a corporate bond.

Dummy (SPV): A dummy variable that equals one if a firm reports non-operating subsidiaries in Exhibit 21 of SEC Form 10-K.

Geopolitical Uncertainty: Industry exposure to the index of geopolitical uncertainty of Caldara and Iacoviello (2018) multiplied by the change in the geopolitical uncertainty index. Industry-level exposure is estimated using a 60-month rolling regression of industry returns on the change in the geopolitical uncertainty index, controlling for the three Fama-French factors. Industries are defined at the Fama-French 48 industry level.

Hedging: A dummy variable that is equal to one if a firm reports in the SEC 10-K Form the use of hedging instruments (derivative, swap, futures, forward contract, options, etc.) against risk related to commodity and energy prices, interest rates, exchange rates, and security prices.

High SPV: A dummy variable that is equal to one if the predicted likelihood of a firm having an SPV is above the sample median, and zero otherwise.

HP Index: Hadlock-Pierce index of financial constraints. It is equal to $-0.737 \times log(AT) + 0.043 \times log(AT)^2 - 0.04 \times Age$, whereby total asset values are deflated to 2000 prices using the CPI.

Intangibles (stock): The sum of R&D stock, SG&A stock, and the stock of computerized information. The stock of computerized information is calculated as the cumulative level of fixed reproducible tangible wealth divided by total assets in an industry (source: BEA) using a depreciation rate of 31%. The SG&A stock is the accumulated SG&A expenditure (XSGA) over total assets, calculated using a perpetual inventory method with a depreciation rate of 20%. SG&A expenditures are deflated to 2000 level (see definitions in Falato et al. (2019))

Inventories: The ratio of inventories (INVT) to total assets (AT).

Payout: Cash dividends (DVC) + purchases of common and preferred stocks (PRSTKC) – sale of common and preferred stocks (SSTK), over total assets (AT).

Leverage: Long-term debt (DLTT) and current portion of long-term debt (DLC) over total assets (AT).

Loan Maturity: The maturity for a syndicated loan facility, in years

Loan Spreads: The all-in-drawn loan spreads of a syndicated loan facility, in basis points over the LIBOR

Loan Size: The log of the dollar amount of a syndicated loan facility

Market Cap: The log of market capitalization of equity, which is calculated as the log level of the product between shares outstanding (CSHO) and year-end share price (PRCC).

M/B: Market-to-book ratio of assets, (AT - CEQ + CSHO*PRCC)/AT.

NWC: Net working capital, net of cash (NWC - CHE), over total assets (AT).

Q3: A dummy variable that equals one for the third quarter of the year, and zero otherwise.

R&D (Dummy): A dummy variable that equals one if R&D expenditures (XRD) are positive, and zero otherwise.

Receivables: The ratio of accounts receivable (RECT) to total assets (AT).

RD (stock): Accumulated R&D expenditures (XRD) over total assets. The accumulated R&D expenditures are calculated using a perpetual inventory method with a depreciation rate of 15%. R&D expenditures are deflated to 2000 level (see definitions in Falato et al. (2019)).

ROA: Net income (NI) over total assets (AT).

Tangible Assets: Firms' property, plant, and equipment (PPENT) over total assets (AT).

Figure 1. Testing the Common Trend Hypothesis

This figure presents the effect of anti-recharacterization laws on firms' *Leverage* (Panel A), *Cash* (Panel B), and *Payout* (Panel C) around the years of adoption. The dots represent coefficient estimates on time dummies starting three years before the law adoption and ending 3 years after. We estimate the equations in Table 2 except that we replace *Law* with dummy variables indicating the year relative to the adoption of anti-recharacterization laws in a given state; 3+ refers to a dummy that takes value equal to one if the firm is incorporated in a state that passed an anti-recharacterization law 4 or more years earlier. The intervals around the dots represent 90% confidence interval. The horizontal axis represents event time around law adoption. All regressions include firm fixed effects and industry-year fixed effects. Standard errors are corrected for heteroscedasticity and clustered at the state level.
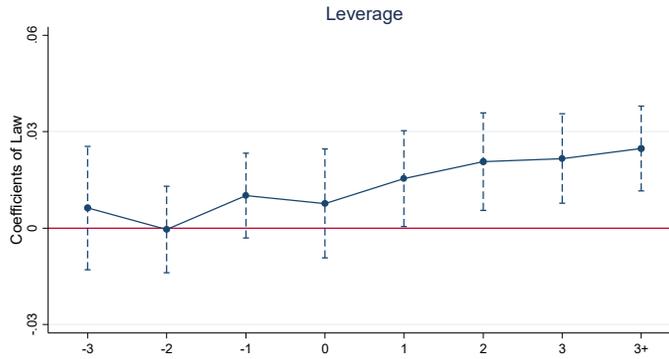
Panel A. Effects of Anti-recharacterization Laws on Leverage
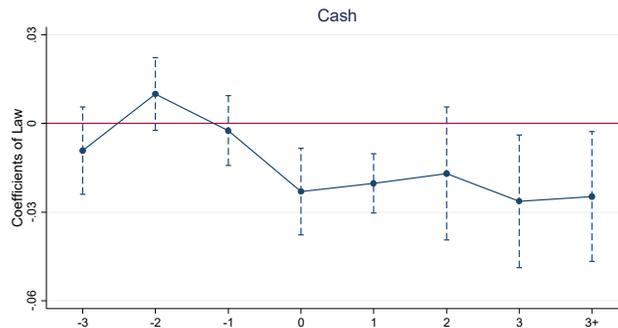
Panel B. Effects of Anti-recharacterization Laws on Cash
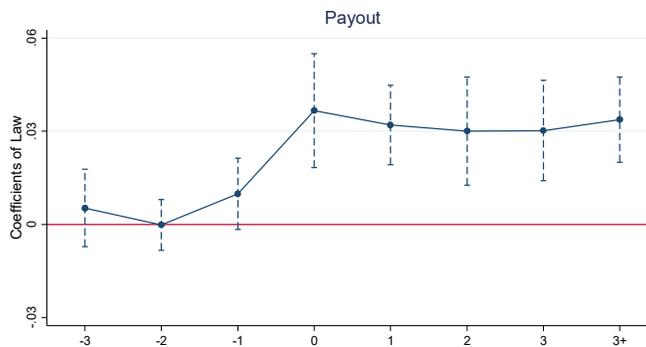
Panel C. Effects of Anti-recharacterization Laws on Payout

Table 1. Summary Statistics

This table reports the summary statistics of the main variables. The sample includes all Compustat firms that are incorporated in the 50 US states and Washington D.C., excluding those in the financial (SIC 6500–6800) and utility (SIC 4900–4999) industries and government sectors (SIC 9000–9999). The sample period spans 1992–2010. All continuous variables except Leverage are winsorized at the 1st and 99th percentiles. Leverage is restricted to vary between 0 and 1. Variable definitions are in the Appendix.

Variable	Observations	Mean	Std. Dev.	Median	25 Percentile	75 Percentile
Cash	75,885	0.2238	0.2939	0.1669	0.0166	0.3451
Payout	66,544	0.2244	0.3059	0.1033	0.0272	0.3069
Leverage	76,170	-0.0713	0.2217	-0.0008	-0.0268	0.0094
ROA	68,237	-0.0311	0.1974	0.0301	-0.0730	0.0852
RD (stock)	78,028	0.2551	0.5356	0.0173	0	0.2743
Intangibles (stock)	77,571	1.5170	1.5755	1.0801	0.4978	1.9442
Tangible Assets	77,915	0.2603	0.2231	0.1907	0.0844	0.3737
Receivables	77,661	0.1678	0.1288	0.1457	0.0675	0.2364
Inventory	77,306	0.1354	0.1496	0.0903	0.0079	0.2119
Loan Spreads	18,897	173.84	119.57	75	150	250
Bond Yield Spreads	3,300	207.94	176.68	145	80	300
CashFlowVol	77,717	0.0710	0.0405	0.0622	0.0384	0.0904
Geopolitical Uncertainty	76,170	-0.0014	0.0516	-0.0005	-0.0166	0.0148
Dummy(SPV)	48,054	0.0044	0.0661	0	0	0
High SPV	34,544	0.5000	0.5000	0	0	1
Hedging	35,936	0.2987	0.4577	0	0	1
Cash Flow	75,945	-0.0359	0.9142	0.0672	-0.0236	0.1189
NWC	74,134	0.0711	0.3581	0.0666	-0.0392	0.2053
Market Cap	75,933	5.1199	2.0853	5.0161	3.5986	6.5258
M/B	75,925	2.1788	1.8896	1.5459	1.1225	2.4256
Acquisition	76,170	0.0239	0.0706	0	0	0.0079
R&D (Dummy)	76,170	0.4923	0.4999	0	0	1

Table 2. Creditor Rights and Financial Policies

This table describes changes in firms' financial policies around the adoption of anti-recharacterization laws. Law is a dummy variable that equals one for firms incorporated in Texas or Louisiana after 1997, Alabama after 2001, Delaware after 2002, South Dakota after 2003, Virginia after 2004, and Nevada after 2005. All variables are defined in the Appendix. All regressions include firm fixed effects and industry-year fixed effects. T-statistics are presented in parentheses. Standard errors are corrected for heteroscedasticity and clustered at the state level. ***, **, * denote significance at 1%, 5%, and 10% levels, respectively.

	(1)	(2)	(3)
Dep. Var.:	Leverage	Cash	Payout
Law	0.0142**	-0.0143**	0.0233***
	(2.45)	(-2.12)	(4.23)
Cash Flow	-0.0009	0.0270***	0.0057***
	(-0.28)	(5.30)	(3.03)
NWC	-0.4122***	-0.0414***	-0.0057
	(-34.26)	(-3.32)	(-1.60)
Market Cap	-0.0368***	0.0637***	-0.0131***
	(-24.30)	(22.90)	(-10.58)
M/B	0.0059***	0.0155***	-0.0290***
	(5.52)	(10.64)	(-36.38)
Acquisition	0.2090***	-0.1560***	-0.0814***
	(10.38)	(-8.76)	(-12.04)
R&D (Dummy)	-0.0052	0.0062	-0.0226***
	(-0.57)	(0.62)	(-3.25)
Firm FE	Yes	Yes	Yes
SIC1-Year FE	Yes	Yes	Yes
Observations	74,670	65,232	74,866
R-squared	0.6991	0.6204	0.4978

Table 3. Creditor Rights, Uncertainty, and Financial Policies

This table describes the effects of uncertainty on firms' financial policies around the adoption of anti-recharacterization laws. Law is a dummy variable that equals one for firms incorporated in Texas or Louisiana after 1997, Alabama after 2001, Delaware after 2002, South Dakota after 2003, Virginia after 2004, and Nevada after 2005. All remaining variables are defined in the Appendix. All regressions include firm fixed effects and industry-year fixed effects, as indicated on the table. T-statistics are presented in parentheses. Standard errors are corrected for heteroscedasticity and clustered at the state level. ***, **, * denote significance at 1%, 5%, and 10% levels, respectively.

	(1)	(2)	(3)	(4)	(5)	(6)
Dep. Var.:	Leverage	Cash	Payout	Leverage	Cash	Payout
Law*CashFlowVol	0.3914***	-0.3571***	0.3384***	0.3295***	-0.2935***	0.2996***
	(9.13)	(-6.97)	(9.02)	(3.33)	(-3.58)	(3.84)
Law	-0.0177**	0.0150*	-0.0051	-0.0150**	0.0110*	-0.0062
	(-2.46)	(1.95)	(-0.91)	(-2.03)	(1.70)	(-1.04)
CashFlowVol	-0.0207	0.0044	0.3084***			
	(-0.18)	(0.08)	(2.91)			
Cash Flow	0.0009	0.0274***	0.0055***	-0.0027	0.0298***	0.0063***
	(0.27)	(5.38)	(2.85)	(-0.93)	(7.30)	(3.35)
NWC	-0.4220***	-0.0436***	-0.0044	-0.4192***	-0.0478***	-0.0031
	(-35.28)	(-3.50)	(-1.16)	(-32.07)	(-4.48)	(-0.89)
Market Cap	-0.0370***	0.0640***	-0.0134***	-0.0368***	0.0687***	-0.0148***
	(-24.42)	(22.80)	(-10.37)	(-21.68)	(23.55)	(-13.92)
M/B	0.0064***	0.0153***	-0.0287***	0.0064***	0.0130***	-0.0272***
	(5.34)	(10.78)	(-38.46)	(5.77)	(9.87)	(-44.26)
Acquisition	0.2081***	-0.1553***	-0.0823***	0.2122***	-0.1622***	-0.0833***
	(10.13)	(-9.13)	(-12.25)	(11.08)	(-10.56)	(-12.09)
R&D (Dummy)	-0.0057	0.0061	-0.0227***	-0.0057	0.0077	-0.0251***
	(-0.61)	(0.59)	(-3.22)	(-0.67)	(0.88)	(-3.06)
Firm FE	Yes	Yes	Yes	Yes	Yes	Yes
SIC1-Year FE	Yes	Yes	Yes	No	No	No
SIC3-Year FE	No	No	No	Yes	Yes	Yes
Observations	74,381	64,978	74,577	73,961	64,537	74,157
R-squared	0.7025	0.6210	0.4990	0.7225	0.6406	0.5253

Table 4. Effects of Anti-Recharacterization Laws before 2003

This table evaluates the effects of anti-recharacterization laws prior to 2003. Law is a dummy variable that equals one for firms incorporated in Texas or Louisiana after 1997 and for firms in Alabama after 2001. All regressions include firm fixed effects and industry-year fixed effects as well as controls as listed in Table 2. The sample stops in 2002. All remaining variables are defined in the Appendix. T-statistics are presented in parentheses. Standard errors are corrected for heteroscedasticity and clustered by state. ***, **, * denote significance at 1%, 5%, and 10% levels, respectively.

	(1)	(2)	(3)
Dep. Var.:	Leverage	Cash	Payout
Law *CashFlowVol	0.1671***	-0.5372***	0.4972***
	(3.45)	(-14.25)	(11.11)
Law	-0.0108*	0.0242***	-0.0086
	(-1.86)	(3.84)	(-1.11)
CashFlowVol	0.1575	-0.4692***	0.8731***
	(0.81)	(-6.49)	(4.77)
Controls	Yes	Yes	Yes
Firm FE	Yes	Yes	Yes
SIC1-Year FE	Yes	Yes	Yes
Observations	49,187	40,802	49,292
R-squared	0.6934	0.6435	0.5193

Table 5. Controlling for Interactions of Headquarters State and Year Fixed Effects

This table controls for headquarters state-year fixed effects, which absorb non parametrically the effects of other laws that may affect firms based on the headquarters state. Law is a dummy variable that equals one for firms incorporated in Texas or Louisiana after 1997, Alabama after 2001, Delaware after 2002, South Dakota after 2003, Virginia after 2004, and Nevada after 2005. All remaining variables are defined in the Appendix. All regressions include firm fixed effects and industry-year fixed effects as well as controls as listed in Table 2. T-statistics are presented in parentheses. Standard errors are corrected for heteroscedasticity and clustered by state. ***, **, * denote significance at 1%, 5%, and 10% levels, respectively.

	(1)	(2)	(3)
Dep. Var.:	Leverage	Cash	Payout
Law*CashFlowVol	0.3686***	-0.3241***	0.3067***
	(7.14)	(-6.48)	(7.22)
Law	-0.0159**	0.0151**	-0.0051
	(-2.32)	(2.14)	(-1.28)
CashFlowVol	0.0252	-0.0347	0.2762**
	(0.23)	(-0.58)	(2.63)
Controls	Yes	Yes	Yes
Firm FE	Yes	Yes	Yes
HQ State-Year FE	Yes	Yes	Yes
SIC1-Year FE	Yes	Yes	Yes
Observations	74,350	64,951	74,546
R-squared	0.7063	0.6276	0.5072

Table 6. Effects of Anti-Recharacterization Laws on Delaware and Non-Delaware Firms

This table examines the effects anti-recharacterization laws on the relation between uncertainty and firms' financial policies for firms incorporated in Delaware and for firms incorporated outside of Delaware. The dependent variables are indicated on top of each column. Panel A reports the results for Delaware firms. The sample includes all firms incorporated in Delaware and those incorporated in states that never passed the law. Panel B reports the results for non-Delaware firms. For this test, we exclude Delaware firms after 2002, i.e., after the passage of the anti-recharacterization law in that state. The test is conducted on a matched sample of treated firms and corresponding control firms in states that did not passed the laws. We match each treated firm to utmost five control firms, which are required to be in the same industry and which have similar levels of cash flow volatility prior to the enaction of the laws. In both panels, Law is a dummy variable that equals one for firms incorporated in Texas or Louisiana after 1997, Alabama after 2001, Delaware after 2002, South Dakota after 2003, Virginia after 2004, and Nevada after 2005. All remaining variables are defined in the Appendix. All regressions include firm fixed effects and industry-year fixed effects as well as controls as listed in Table 2. T-statistics are presented in parentheses. Standard errors are corrected for heteroscedasticity and clustered by state. ***, **, * denote significance at 1%, 5%, and 10% levels, respectively.

Panel A. Effects on Delaware Firms

	(1)	(2)	(3)
Dep. Var.:	Leverage	Cash	Payout
Law*CashFlowVol	0.4052***	-0.3816***	0.3308***
	(8.27)	(-11.05)	(8.19)
Law	-0.0167**	0.0163*	-0.0019
	(-2.03)	(1.94)	(-0.31)
CashFlowVol	-0.0186	-0.0030	0.3415***
	(-0.16)	(-0.05)	(3.29)
Controls	Yes	Yes	Yes
Firm FE	Yes	Yes	Yes
SIC1-Year FE	Yes	Yes	Yes
Observations	69,950	61,147	70,146
R-squared	0.6964	0.6232	0.5003

(*Continued*)

Table 6 – *Continued*
Panel B. Effects on Non-Delaware Firms

Dep. Var.:	(1) Leverage	(2) Cash	(3) Payout
Law*CashFlowVol	0.2787**	-0.3671*	0.2050*
	(2.15)	(-1.79)	(1.80)
Law	-0.0078	0.0011	-0.0091
	(-0.59)	(0.07)	(-1.17)
CashFlowVol	-0.4832**	-0.0479	0.1792
	(-2.22)	(-0.29)	(0.83)
Controls	Yes	Yes	Yes
Firm FE	Yes	Yes	Yes
SIC1-Year FE	Yes	Yes	Yes
Observations	40,365	39,081	40,441
R-squared	0.6773	0.6933	0.5925

Table 7. Creditor Rights, Firm Policies, and Other Shocks to Uncertainty

This table examines the effects of shocks to uncertainty on firms' financial policies around the adoption of anti-recharacterization laws. The dependent variables are indicated on top of each column. Panel A measures uncertainty using the industry average level of geopolitical uncertainty. Geopolitical uncertainty is the average change in the indicator of geopolitical risk of Caldara and Iacovello (2018) times the exposure of a firm's industry to this indicator over the past 12 months. An industry's exposure to geopolitical uncertainty is estimated as the beta of the industry's monthly stock returns on the changes in the geopolitical risk index using a rolling window of the past 60 months and controlling for the three Fama-French factors. In Panel B, we use U.S. gubernatorial elections as a source of political uncertainty. The sample consists of firm-election-year quarterly observations from 1992 to 2010. Following Jens (2017), for a given firm, we only include years in which the firm's headquarters state hosts a gubernatorial election, and we compare the firm's financial policies during the third quarter of a close election year to its own policies in other quarters. Close elections are defined as election years in which the percentage vote difference between the winner and the runner-up parties ends up being at the bottom tercile of the sample. Law is a dummy variable that equals one for firms incorporated in Texas or Louisiana after 1997, Alabama after 2001, Delaware after 2002, South Dakota after 2003, Virginia after 2004, and Nevada after 2005. All remaining variables are defined in the Appendix. All regressions include firm fixed effects and industry-time fixed effects as well as controls as listed in Table 2. T-statistics are presented in parentheses. Standard errors are corrected for heteroscedasticity and clustered by state. ***, **, * denote significance at 1%, 5%, and 10% levels, respectively.

Panel A. Geopolitical Uncertainty

	(1)	(2)	(3)
Dep. Var.:	Leverage	Cash	Payout
Law*Geopolitical Uncertainty	0.0379**	-0.0415**	0.0515***
	(2.09)	(-2.24)	(4.60)
Law	0.0164***	-0.0158**	0.0246***
	(2.82)	(-2.33)	(4.51)
Geopolitical Uncertainty	-0.0030	0.0487***	-0.0126
	(-0.17)	(3.50)	(-1.28)
Controls	Yes	Yes	Yes
Firm FE	Yes	Yes	Yes
SIC1-Year FE	Yes	Yes	Yes
Observations	72,839	63,587	73,036
R-squared	0.6997	0.6214	0.4978

(*Continued*)

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Table 7 – *Continued*

Panel B. Political Uncertainty (Gubernatorial Elections)

	(1) Leverage	(2) Cash	(3) Payout
Close Election*Q3*Law	-0.0002	-0.0131***	0.0061***
	(-0.07)	(-2.92)	(3.32)
Close Election	0.0084**	0.0032	0.0006
	(2.19)	(0.83)	(0.52)
Close Election*Q3	0.0001	0.0006	-0.0007
	(0.04)	(0.27)	(-0.56)
Law	0.0068	0.0064	0.0002
	(0.99)	(0.85)	(0.16)
Close Election*Law	-0.0113**	0.0008	-0.0022
	(-2.44)	(0.16)	(-1.07)
Q3*Law	-0.0031	-0.0029	0.0000
	(-1.49)	(-0.75)	(0.01)
Controls	Yes	Yes	Yes
SIC1-Year-Quarter FE	Yes	Yes	Yes
Firm FE	Yes	Yes	Yes
Observations	46,450	46,726	46,863
R-squared	0.7516	0.6960	0.3343

Table 8. Creditor Rights, Uncertainty, Firm Performance, and Operating Policies

This table examines the effects of uncertainty on firm performance and operating policies around the adoption of anti-recharacterization laws. Dependent variables are indicated on top of each column. Law is a dummy variable that equals one for firms incorporated in Texas or Louisiana after 1997, Alabama after 2001, Delaware after 2002, South Dakota after 2003, Virginia after 2004, and Nevada after 2005. All remaining variables are defined in the Appendix. All regressions include firm fixed effects and industry-year fixed effects as well as controls as listed in Table 2. T-statistics are presented in parentheses. Standard errors are corrected for heteroscedasticity and clustered by state. ***, **, * denote significance at 1%, 5%, and 10% levels, respectively.

Dep. Var.:	(1) ROA	(2) RD (stock)	(3) Intangible (stock)	(4) Tangible Assets	(5) Receivables	(6) Inventories
Law*CashFlowVol	0.2730***	1.1218***	2.2214***	0.0094	0.0555***	0.0345*
	(3.53)	(6.22)	(5.24)	(0.19)	(2.92)	(1.76)
Law	-0.0129**	-0.0257	-0.0265	0.0051	-0.0025	-0.0006
	(-2.24)	(-1.49)	(-0.48)	(0.91)	(-1.00)	(-0.18)
CashFlowVol	0.0319	2.1714***	5.6610***	0.0736	-0.0452	-0.0467
	(0.29)	(4.09)	(5.39)	(1.63)	(-0.81)	(-1.34)
Controls	Yes	Yes	Yes	Yes	Yes	Yes
Firm FE	Yes	Yes	Yes	Yes	Yes	Yes
SIC1-Year FE	Yes	Yes	Yes	Yes	Yes	Yes
Observations	65,229	74,860	74,520	74,849	76,161	75,817
R-squared	0.6838	0.7898	0.7674	0.8941	0.8111	0.8957

Table 9. Changes in SPV Usage

This table describes firms' usage of SPVs around the adoption of anti-recharacterization law. Panel A examines the changes in firms' usage of SPVs around the adoption of anti-recharacterization law. The dependent variable is an indicator for whether a firm reports SPVs in its 10-K filings to the SEC, in a given year, Dummy(SPV), but did not report an SPV in the previous year. Panel B examines whether firms' use of SPVs affects the way anti-recharacterization laws influence their financial policies. High SPV is a dummy variable that is equal to one if a firm's predicted likelihood of using SPVs is above the sample median and is zero otherwise. The probability that firms use SPVs is predicted using firms' characteristics: market capitalization, market-to-book ratio, cash flow, working capital, acquisition expenses, and R&D expenses. For treated firms, we consider only observations before the passage of the laws to predict the probability that a firm uses an SPV. Law is a dummy variable that equals one for firms incorporated in Texas or Louisiana after 1997, Alabama after 2001, Delaware after 2002, South Dakota after 2003, Virginia after 2004, and Nevada after 2005. All variables are defined in the Appendix. All regressions include firm fixed effects and industry-year fixed effects as well as controls as listed in Table 2 whose coefficients have been omitted. T-statistics are presented in parentheses. Standard errors are corrected for heteroscedasticity and clustered by state. ***, **, * denote significance at 1%, 5%, and 10% levels, respectively.

Panel A. SPV Usage and Anti-recharacterization Laws

Dep. Var.: Dummy(SPV)	(1)	(2)
Law	-0.0011	-0.0031
	(-0.63)	(-1.37)
Law*CashFlowVol		0.0250**
		(2.19)
CashFlowVol		-0.0041
		(-0.17)
Controls	Yes	Yes
Firm FE	Yes	Yes
SIC1-Year FE	Yes	Yes
Observations	45,900	45,725
R-squared	0.1042	0.1042

(*Continued*)

Table 9 – *Continued*
Panel B. Effects of SPVs on Financial Policies

Dep. Var.:	(1) Leverage	(2) Cash	(3) Payout
High SPV*Law*CashFlowVol	0.1403**	-0.9616***	0.2291***
	(2.35)	(-5.09)	(2.82)
Law*CashFlowVol	0.3305***	0.1715**	0.0915**
	(4.07)	(2.02)	(2.27)
Law	-0.0189**	-0.0183***	-0.0097***
	(-2.52)	(-2.70)	(-3.08)
CashFlowVol	-0.4323***	0.0057	-0.1188**
	(-2.93)	(0.04)	(-2.03)
High SPV	-0.0256***	-0.0235**	0.0004
	(-3.78)	(-2.11)	(0.10)
High SPV*Law	-0.0040	0.0538***	-0.0102***
	(-0.71)	(4.29)	(-2.70)
High SPV*CashFlowVol	0.2237**	0.6893***	-0.1387
	(2.26)	(2.87)	(-1.41)
Controls	Yes	Yes	Yes
Firm FE	Yes	Yes	Yes
SIC1-Year FE	Yes	Yes	Yes
Observations	33,660	33,672	33,770
R-squared	0.7465	0.6704	0.5297

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Table 10. Creditor Rights and Costs of Debt

This table examines changes in firms' costs of debt around the adoption of anti-recharacterization laws. Panel A shows the results for syndicated loans spreads (in basis points over the LIBOR), and Panel B reports results for bond issuance spreads (in basis points over Treasury bond yields of comparable maturity). We consider only U.S. dollar-denominated bonds issued by U.S. industrial firms and that are non-convertible, non-puttable and without credit enhancements. All regressions include state of incorporation fixed effects and industry-year fixed effects. In column 2 of each panel, we add firm-level controls as listed in Table 2. T-statistics are presented in parentheses. Standard errors are corrected for heteroscedasticity and clustered by state. ***, **, * denote significance at 1%, 5%, and 10% levels, respectively.

Panel A. Syndicated Loan Spreads

Dep. Var.: Loan Spreads	(1)	(2)
Law*CashFlowVol	-93.52***	-52.77*
	(-3.37)	(-1.81)
Law	5.40	4.06
	(1.36)	(1.14)
CashFlowVol	9.90	19.49
	(0.30)	(0.65)
Loan Size	-19.53***	-9.40***
	(-27.57)	(-8.57)
Loan Maturity	2.04***	1.28***
	(5.69)	(2.80)
Controls	No	Yes
State FE	Yes	Yes
SIC1-Year FE	Yes	Yes
Rating FE	Yes	Yes
Loan Type FE		
	18,122	18,122
Observations	0.46	0.51
R-squared	-93.52***	-52.77*

(*Continued*)

Table 10 – *Continued*
Panel B. Bond Issuance Spreads

Dep. Var.: Bond Yield Spreads	(1)	(2)
Law* CashFlowVol	-191.74**	-171.33**
	(-2.31)	(-2.16)
Law	19.12**	17.30**
	(2.30)	(2.15)
CashFlowVol	90.70	117.47
	(1.18)	(1.47)
Bond Size	-8.45***	3.58
	(-3.50)	(1.31)
Bond Maturity	-0.82***	-0.39**
	(-4.95)	(-2.64)
Coupon Rate	34.05***	28.21***
	(7.23)	(7.01)
Callable	108.44***	87.27***
	(6.56)	(5.93)
Controls	No	Yes
State FE	Yes	Yes
SIC1-Year FE	Yes	Yes
Rating FE	Yes	Yes
Observations	3,280	3,280
R-squared	0.66	0.67

Table 11. Changes in Hedging

This table examines firms' hedging behavior around the adoption of anti-recharacterization laws. The dependent variable is an indicator variable for hedging. Hedging indicates whether a firm reports derivatives usage in a given year or the previous year. In column 1, uncertainty is measured by industry cash flow volatility. In column 2, uncertainty is measured by an industry's exposure to geopolitical uncertainty. All remaining variables are defined in the Appendix. All regressions include firm fixed effects and industry-year fixed effects as well as controls as listed in Table 2. T-statistics are presented in parentheses. Standard errors are corrected for heteroscedasticity and clustered by state. ***, **, * denote significance at 1%, 5%, and 10% levels, respectively.

	(1)	(2)
Uncertainty Measured by:	CashFlowVol	Geopolitical Uncertainty
Dep. Var.:	Hedging	Hedging
Law*Uncertainty	-0.2189*	-0.0781*
	(-1.77)	(-1.73)
Law	0.0353**	0.0138
	(2.28)	(0.98)
Uncertainty	-0.8045***	-0.0230
	(-2.90)	(-0.66)
Controls	Yes	Yes
Firm FE	Yes	Yes
SIC1-Year FE	Yes	Yes
Observations	34,401	33,974
R-squared	0.6121	0.6126

Table 12. Creditor Rights, Uncertainty and Firms' Financial Constraints

This table examines whether changes in firms' responses to uncertainty around the adoption of anti-recharacterization laws depend on firms' financial constraints. HP stands for Hadlock-Pierce index, with higher values indicating stronger financial constraints (Hadlock and Pierce (2010)). Law is a dummy variable that equals one for firms incorporated in Texas or Louisiana after 1997, Alabama after 2001, Delaware after 2002, South Dakota after 2003, Virginia after 2004, and Nevada after 2005. All remaining variables are defined in the Appendix. All regressions include firm fixed effects and industry-year fixed effects as well as controls as listed in Table 2. T-statistics are presented in parentheses. Standard errors are corrected for heteroscedasticity and clustered by state. ***, **, * denote significance at 1%, 5%, and 10% levels, respectively.

Dep. Var.:	(1) Leverage	(2) Cash	(3) Payout
Law*CashFlowVol	0.4290***	-0.2740***	0.1498***
	(8.57)	(-6.28)	(2.68)
Law	-0.0510***	-0.0656***	0.1710***
	(-7.41)	(-4.48)	(8.57)
CashFlowVol	-0.0531	-0.0254	0.3475***
	(-0.43)	(-0.51)	(2.70)
Law*HP Index	-0.0096***	-0.0219***	0.0471***
	(-7.43)	(-5.77)	(11.61)
HP Index	-0.2181***	-0.1078***	-0.0931***
	(-40.61)	(-3.72)	(-17.39)
Controls	Yes	Yes	Yes
Firm FE	Yes	Yes	Yes
SIC1-Year FE	Yes	Yes	Yes
Observations	74,381	64,978	74,577
R-squared	0.7130	0.6234	0.5052

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