Creditor Rights, Debt Capacity and Securities Issuance: Evidence from Anti-Recharacterization Laws

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Abstract

This paper examines the effects of improvement in creditors' rights protection on firms' financing choices and securities issuance. To address these issues, I exploit exogenous variation in creditors' rights protection induced by the staggered adoption of anti-recharacterization laws by some U.S. states. The laws enhance the ability of creditors to repossess collateral during bankruptcy. Using a difference-in-difference methodology to estimate the causal impacts, I find that: [1] the laws are positively related to debt capacity and debt maturity. Firms increase market leverage and substitute away from costly short-term debt financing into long-term debt financing [2] the laws are positively related to debt issuance [3] the laws are negatively related to equity issuance. My analysis further demonstrates that proactive securities issuers are significantly more responsive to the adoption of anti-recharacterization laws than passive securities issuers.

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1 Introduction

A considerable body of literature has explored the effects of stronger creditors' rights protection on firms' financing decisions. Most of the extant literature focuses on institutions, legal origins and cross-country settings to study the impact of creditors' rights protection on external financing. The results are generally inconsistent. Some papers find that stronger creditors' rights are associated with reduction in information asymmetry and increase in lending activities; while others find that due to costly asset liquidation in default, stronger creditors' rights discourage the use of secured debt financing[1]. While the cross-country setting provides a granular understanding of the effects of stronger creditors' rights protection on financing decisions, it nevertheless suffers from the fact that cross-country differentials in both the type of creditors' rights protection and the type of enforcement mechanism are significant enough to generate contrasting results[2].

In this paper, I exploit a plausibly within-country exogenous variation in creditors' rights protection; namely the staggered adoption of anti-recharacterization laws by some U.S states. Under the U.S bankruptcy code 11 ("Chapter 11"- henceforth), the automatic stay clause gives discretionary rights to courts to identify collateral as either loans or true sales, and to declare the bankrupt firm as *"debtor in possession"*. Essentially, the automatic stay clause requires that once a firm files for bankruptcy, the courts should grant and empower the firm to have control rights over pledgeable assets. The bankrupt firm then retains its assets and possessions while undergoing reorganization. As a result, creditors are unable to seize

[1]See La Porta et al. (1997, 1998), Djankov et al., (2007), Galindo and Micco, (2005), Acharya and Subramanian, (2009), Acharya, Shin and Yorulmazer,(2011), Ghoul et al, (2012), Vig, (2013), Pistor, (2005).

[2]Countries differ in collateral limitations, bankrutpcy exemptions, discharge provisions, credit regulations, political values, statutory responses and corruption levels. These factors significantly affect the credibility and enforceability of laws especially in under developed and emerging markets.

collateral until the bankrupt firm has fully undergone liquidation or restructuring. This delay in creditors ability to recoup collateral results in uncertainty regarding the eventual value of claims and widens the misalignment in incentives between creditors and borrowers.

Following significant lobbying activities by the banking and securitization industries, seven U.S. states adopted anti-recharacterization laws (Kettering, 2008). These adoptions took place between 1997 and 2005. The seven states that adopted the laws are: Alabama (2001), Delaware (2002), Louisiana (1997), Nevada (2005), South Dakota (2003), Texas (1997) and Virginia (2004). These new laws enhanced the ability of creditors to repossess collateral during bankruptcy within these seven jurisdictions. In particular, under anti-recharacterization laws, firms first transfer collateral into special purpose vehicles (SPVs). These SPVs are generally low risk and tend to remain solvent reducing uncertainty regarding the value of collateral- even when the firm in question is undergoing restructuring. Additionally, under these new laws, the courts can no longer re-characterize true sales as loans. Thus, anti-recharacterization laws protect creditors from automatic stay and allow creditors to swiftly seize collateral or pledgeable assets from SPVs if a firm files for bankruptcy. As such, the states' staggered introduction of anti-recharacterization laws serves as a quasi-natural experiment since the laws improve access to external financing independent of firms' growth opportunities, and facilitate the pledgeability of assets for firms incorporated in these seven states (Mann 2017 ,Chu 2018, Favara, Gao and Giannetti 2018, Li, Whited and Wu 2016). The passage of anti-recharacterization laws, therefore, provides a setting to not only investigate how firms respond to exogenous shocks in access to external financing but to also establish the causal effects of these responses. To this effect, I hypothesize and test the following conjectures: [1] Anti-recharacterization laws are associated with increase in debt capacity; [2] Anti-recharacterization laws are associated with increase in debt issuance; [3] Anti-recharacterization laws are associated with decline in equity issuance. Using a difference-in-differences methodology to estimate the causal impacts, I find strong evidence in support of these three conjectures.

Firstly, I examine the effects of stronger creditors' rights protection on firms' access

to external financing. Anti-recharacterization laws enhance creditors' rights by facilitating swift seizure of collateral, and by reducing uncertainty regarding the value of pledgeable assets during bankruptcy. As such, following the passage of the laws, we would expect that creditors would be more willing to extend debt financing, which would lead to an increase in firms' debt capacity. Consistent with this hypothesis, I find that the adoption of anti-recharacterization laws is positively related to market leverage. Interestingly, I also find that anti-recharacterization laws affect debt maturity. Firms on average increase the proportion of long-term debt and reduce the proportion of short-term debt in their capital structure. This is because the enhanced ability of creditors to repossess collateral during bankruptcy minimizes information asymmetry and reduces uncertainty regarding the value of collateral. Hence, creditors are more willing to provide long-term debt financing. Firms rebalance the composition of debt structure; that is, firms substitute away from costly short-term debt financing towards long-term debt financing. The results establish that the adoption of anti-recharacterization laws is not only positively associated with an increase in debt capacity but also affects firms' debt structure.

Second, I examine whether the staggered introduction of anti-recharacterization laws affects securities issuance and financing choices of firms incorporated in adopting states[3]. There are several reasons why improvement in creditors' rights protection may affects firms' securities issuance. Under the trade-off theory, capital structure is a result of firms trading off various costs and benefits. Such costs include bankruptcy costs and transaction costs. The strengthening of creditors' rights minimizes transaction costs and reduces uncertainty associated with the value of underlying collateral during bankruptcy. Both of these effects lead to increase in debt capacity and increase in lending activities. The key idea here is that since anti-recharacterization laws lead to exogenous increase in leverage, we would expect that the laws are positively related to debt issuance. My results largely support this hypothesis. I also find that this result is mostly driven by firms that proactively issue debt. A firm is classified as a proactive debt issuer if its total debt issuance in a given year is at

[3]Hovakimian, Opler and Titman (2001) find that security issuance is generally a function of deviation from target leverage. Their results imply that increase in debt capacity has implications for securities issuance.

least 5% of book value of assets. Proactive issuers tend to have higher needs for external financing and are therefore more likely to take advantage of the increase in access to debt financing following the adoption of anti-recharacterization laws.

My analysis also indicates that firms incorporated in states that have adopted anti-recharacterization laws reduce equity issuance. A firm's decision to issue equity is generally perceived as a sign of overvaluation (Myers and Majluf, 1984) and on average results in stock price decline (Asquith and Mullins, 1986, Loughran and Ritter, 1995). The exogenous increase in debt capacity following the adoption of anti-recharacterization laws implies that firms are more likely to reduce equity issuance. This is partly because even a small variance in the costs of issuing equity versus issuing debt can generate significant utilization of debt over equity (Almeida and Campello, 2007). Anti-recharacterization laws significantly increase the probability of creditors repossessing collateral in adopting states during bankruptcy or during financial distress, which reduces the uncertainty regarding the value of collateralized assets and leads to increase in debt capacity. Consistent with this hypothesis, I find that firms reduce equity issuance following the adoption of anti-recharacterization laws. Interestingly, I also find that the documented reduction in equity issuance is mostly driven by frequent or proactive equity issuers. Proactive equity issuers tend to face higher reduction in firm value[4] and are therefore more likely to opportunitiscally reduce equity issuance when faced with increased debt capacity and improved access to external financing. Additionally, I also find that firms incorporated in adopting states also increase stock repurchases.

These findings are robust to a number of concerns. The first concern is that the results may be due to confounding effects. To address this concern, I conduct a placebo test; that is, I use a randomized matched subsample in which the documented treatment effects are expected <u>not</u> to be observed. I find that the observed treatment effects of anti-recharacterization laws on firms' financing choices and securities issuance decisions are not observed in the placebo group. I also find that the results are consistent and stronger

[4]Billet, Flannery and Garfinkel (2011): "We find that multiple patterns generate much worse performance than single events...underperformance is more a function of the variety and frequency of firms' issuance activities".

when we only examine the three states that adopted anti-recharacterization laws before 2003, prior to the first legal challenge. Additional robustness tests include: [1] Demonstrating that the results are robust to accounting for the effects of the 2008 financial crisis, [2] Demonstrating that the results are consistent and more pronounced amongst financial constrained firms, [3] Demonstrating that the results are consistent when accounting for the availability of internal funds, [4] Demonstrating that the results are not due to mechanical balance sheet expansion or growth in firm level covariates.

This paper contributes to several strands of existing literature. First, I contribute to the emerging and ongoing literature on the effects of anti-recharacterization laws on firms' performance. Mann (2017) examines the role of anti-recharacterization laws in the context of patents and innovation and documents a positive relationship. Chu (2018) finds that anti-recharacterization laws reduce corporate leasing and that this result is mostly concentrated amongst financially constrained firms. Favara, Gao and Giannetti (2018) find that anti-recharacterization laws mitigate the effects of uncertainty on firms' behavior. Li, Whited and Wu (2016) find that anti-recharacterization laws enhances financial flexibility. And Ersahin (2018) finds that anti-recharacterization laws are positively related to firm productivity. However, none of these papers examine the effects of anti-recharacterization laws on firms' debt structure and securities issuance. In particular, external financing is costly and the adoption of laws that strengthen creditors' rights minimizes information asymmetry and directly impacts securities issuance decisions. I first document that following the adoption of anti-recharacterization laws, firms increase debt capacity. Specifically, firms in the adopting states increase total market leverage, reduce short-term debt financing and increase the fraction of long-term debt in their capital structure. I then present evidence to the effect that the documented increase in debt capacity has profound implications for firms' financing activities. In particular, I find that firms incorporated in the adopting states not only increase market leverage but also significantly increase debt issuance and significantly decrease equity issuance.

Second, I contribute to the literature that examines the effects of stronger creditors'

rights protection on firms' performance. Central to this literature is the argument that credit would not be extended if there were no credible legal enforcement mechanisms. The legal enforcement mechanism under consideration in this paper is the ability of creditors to repossess collateral during default or bankruptcy. The extant literature in this area has documented contrasting results. For instance, Vig (2013) examines the effects of the passage of a law in India that enhances creditors' ability to repossess collateral and finds reduction in the overall leverage and secured debt financing. Liu et al. (2018) examine the passage of the first property rights laws in China and find that firms reduce leverage. Coco (2000) presents a model in which collateral mitigates information asymmetry and enhances extension of credit. And find that when the threat to repossess collateral during default is credible, it aligns borrowers and lenders incentives and facilitate lending activities. Eisfeldt and Rampini (2013) present a model in which both leasing and collateral affects capital structure. La Porta et al (1997, 1998)[5] and Galindo and Micco (2001) show that stronger creditors' rights protection affects financial market development and encourages extension of credit to risky and smaller firms. My results largely support the notion that stronger creditors' rights protection facilitates lending activities and results in more efficient capital markets. These results stand in contrast to the negative relation between stronger creditors rights and leverage documented in Vig (2013) and Liu et al. (2018), whose sample consists of Indian firms and Chinese firms respectively.

Third, I contribute to the literature on securities issuance. McKeon (2012), Denis and McKeon (2012) find that firms decrease large equity issuance following increase in access to debt financing. Frank and Goyal (2015) study the effects of profitability on changes in equity due to active securities issuances and repurchases of securities. And find that proactive issuers tend to reduce equity issuance following increase in profitability. Billet, Flannery and Garfinkel (2011), and Ritter and Huang (2018) find that the frequency and recency of security issuance results in lower long-run abnormal returns. DeAngelo, DeAngelo

[5]La Porta et al. (1998)"..creditors are paid because they have the right to repossess collateral. Without these rights, investors would not be paid, and therefore firms would not have the benefit of raising funds from investors..."

and Whited (2011) find that financial flexibility, that is unused debt capacity, plays a key role in capital structure dynamics. Note that none of these papers explicitly examine the effects of stronger creditors' rights protection on securities issuance decisions. However, my results are generally consistent with the overarching themes and findings in the securities issuance literature. To the best of my knowledge, this paper is the first to study the effects of anti-recharacterization laws on debt maturity and firms' securities issuance decisions. In particular, I find that improvement in creditors' rights protection can partially resolve the puzzling observation that firms tend to reduce equity issuance after exogenous shock in their debt capacity[6]. I also find that firms reduce equity issuance and increase debt issuance following the adoption of anti-recharacterization laws.

The rest of this paper is organised as follows. Section [2] presents firm-level data and institutional details on anti-recharacterization laws. Section [3] describes the identification strategy. Section [4] analyzes the relationship between the adoption of anti-recharacterization laws, debt capacity, external financing and securities issuance. Section [5] presents a battery of robustness tests. Section [6] concludes.

2 Data

2.1 Firm-Level Data

The sample consists of all U.S incorporated firms with total assets greater than $10Million between 1990 and 2012. All data are extracted from the Compustat database, North America Fundamentals Annual file. I exclude financial firms (SIC 6000-6999) since it is difficult to assess their liquidity levels. I also exclude utilities (SIC 4900-4999) since their operations are subjected to government regulations. For a firm to be included in Compustat, I require that the state of incorporation be available in Compustat.

Table [1] presents the summary statistics of all relevant financial variables. The reported statistics are: mean, median, standard deviation, 25^{th} and 75^{th} per centile respectively.

[6]See Denis and Mckeon (2012) fo discussion of this puzzle within the context of trade-off models

Selection of firm-level controls is similar to Frank and Goyal (2009, 2015) and Favara, Gao and Giannetti (2018). Leverage is estimated as the sum of long-term debt (DLTT) and debt in current liabilities (DLC) scaled by total assets. The average leverage is about 0.23 while the 25^{th} per centile of the leverage distributon is about 0.0175 and the 75^{th} per centile is about 0.37. Net leverage is estimated as leverage net of cash, where cash is estimated as cash and short-term investment (CHE) scaled by total assets. Cash has a mean and a median of 20% and 9.5% respectively. To be consistent with prior literature, size is estimated as the natural logarithms of total sales. Note that in the data, the correlation between total sales and total assets is about 90%, implying that sales is a robust proxy for firm size. Profits are estimated as operating income before ordinary expense (OIBDP) scaled by total assets, while tangibility is estimated as the property, plant and equipment (PPENT) scaled by total assets and averages around 27%.

Market-to-book (MB) ratio is estimated as the ratio of total market value of assets to book value of assets. Market value of assets is estimated as the sum of total assets and market value of equity less ordinary equity. The average MB is about 2.30. Debt issuance is estimated as issuance of long-term debt (dltis) plus increase in current debt (dlcch). The average debt issue as a percent of total assets is about 7%. Equity issuance is estimated as sale of common stock (prstkc) scaled by total assets. And the average equity issue is 12% of total assets . Investment is capx scaled by total assets. The dividend dummy equals to "1" if a firm pays dividend in that fiscal year, otherwise it equals to zero.

[INSERT TABLE 1 ABOUT HERE]

2.2 Institutional Background: The Staggered Adoption of Anti-Recharacterization Laws

The availability of collateral is perhaps the most important determinant of access to external financing. Collateral reduces information asymmetry and aligns incentives between borrowers and creditors. In order to credibly signal availability of collateral, firms

can first transfer collateral or pledged assets to special purpose vehicles (SPVs)[7]. The main advantage of using SPVs is that they remain solvent even during bankruptcy or financial distress. This is because SPVs tend to have limited exposure to risk; as such pledgeable assets retain value over time.

However, through the automatic stay clause the courts have the ultimate discretionary rights to re-characterize assets in SPVs as either loans or true sales. That is, before the state adoption of anti-recharacterization laws, the automatic stay clause in the bankrupcy code (Chapter 11) implies that creditors are constrained in their capacity to repossess collateral. The motivation behind the adoption of anti-recharacterization laws is that by ensuring true sales are characterized as such, the laws effectively transfer some control rights from borrowers to creditors. Creditors are thus able to seize pledged assets in case the firm files for Chapter 11. Hence, anti-recharacterization laws effectively shield creditors from automatic stay.

The passage of anti-recharacterization laws also strengthens creditors rights by both minimizing the uncertainty associated with collateral value, and by treating collateral in SPVs as true sales if labelled as such. The laws came to fruition as a result of intense lobbying from the banking and securitization industries (Kettering, 2008). As a result of these lobbying activities, seven U.S states passed laws specifically mandating that collateral transfers to special purpose vehicles (SPVs) be treated as true sales if they are labelled as such. The seven states that adopted anti-recharacterization laws are: Texas and Louisiana in 1997, Alabama in 2001, Delaware in 2002, South Dakota in 2003, Virginia in 2004, and Nevada in 2005.

The fact that it was the lobbying efforts by the banking and securitization industries that led to the drafting and introduction of anti-recharacterization laws makes the adoption of these laws plausibly exogenous. Hence, the staggered introduction of anti-recharacterization laws serves as a quasi-natural experiment to evaluate firms' response to this exogenous increase in access to external financing. The laws effectively

[7]See Feng, Gramlich and Gupta (2009), Gorton and Souleles (2007) for detailed discussion on use of special purpose vehicles(SPVs)

strengthened creditors' rights by: [1] Facilitating swift seizure and repossession of assets from SPVs, [2] Limiting applicability of automatic stays and [3] Reducing uncertainty regarding the value of collaterized assets. Overall, anti-recharacterization laws reduce the wedge and misalignment in incentives between creditors and borrowers. As such, we would expect that improvement in creditors' ability to repossess collateral or pledgeable assets during bankruptcy or financial distress would be positively related to debt capacity.

3 Empirical Design and Identification Strategy

This paper examines the effects of anti-recharacterization laws on firms' debt capacity, external financing and securities issuance. The main objective is to examine how improvement in creditors' rights protection affects firms' financing choices. The null hypotheses aim to address the following questions for firms incorporated in the adopting states: [1] What are the effects of anti-recharacterization laws on firms' debt capacity and debt structure, [2] What are the effects of anti-recharacterization laws on firms' securities issuance decisions {that is the choice between debt and equity financing}? My regression analysis shows that after the adoption of anti-recharacterization laws, firms incorporated in the adopting states increase total market leverage, decrease short-term debt financing and increase the fraction of long-term debt in their capital structure. These firms also reduce equity issuance and increase debt issuance.

To test the above hypotheses, my identification strategy compares firms' financing choices and securities issuance in adopting states with financing choices and securities issuance of firms incorporated in non-adopting states, before and after the adoption of anti-recharacterization laws. I start by estimating the following difference-in-difference panel regression model[8]:

$$y_{i,s,t} = \alpha_i + \beta_1 Law_{i,s,t} + \mathbf{X'_{it}}\psi + \eta_i + \delta_t + \epsilon_{it} \tag{1}$$

[8]A similar approach is applied in Mann, 2017, Favara, Gao and Giannetti, 2018, Li, Whited and Wu, 2016.

where $y_{i,s,t}$ is an outcome of firm "i" incorporated in state "s" during year "t". $\mathbf{X_{it}}$ is a vector of firm-level variables that are highly correlated with leverage."Law" is a dummy variable equal to "1" if a firm is "treated", that is if a firm is incorporated in state "s" that has adopted anti-recharacterization laws at time "t". Because of the staggered introduction of the anti-recharacterization laws, the dummy "Law" takes the value of "1": if a firm is incorporated in either Texas or Louisiana after 1997, if a firm is incorporated in Alabama after 2001, if a firm is incorporated in Delaware after 2002, if a firm is incorporated in South Dakota after 2003, if a firm is incorporated in Virginia after 2004, and if a firm is incorporated in Nevada after 2005. A firm is "treated" if it is incorporated in state "s" that has adopted the anti-recharacterization laws at time "t". All standard errors are clustered at firm-level. η_i is the firm fixed effects, δ_t is time fixed effects and ϵ_{it} is the error term. And α_i is a vector capturing firm-specific intercepts.

As outlined above, the main goal of this paper is to study the effects of stronger creditors' rights protection on financing choices, firms' debt capacity and securities issuance. To this effect, I exploit the exogenous variation in creditors' rights protection induced by the staggered introduction of anti-recharacterization laws by some U.S states. I start by examining the effects of anti-recharacterization laws on firms' debt capacity. My primary proxy for debt capacity is market leverage; the advantage of using this measure of leverage is that it is generally forward-looking and therefore takes into account the exogenous increase in debt capacity. Consistent with Denis and McKeon (2012), market leverage is estimated as[9]:

$$\begin{aligned} MarketLeverage_{it} &= \frac{DLTT_{it} + DLC_{it}}{DLTT_{it} + DLC_{it} + MVE}, \\ st.MVE &= PRCC_{it}XCSHO_{it} \end{aligned} \tag{2}$$

Where DLC is debt in current liabilities including the portion of long-term debt due within one year, and DLTT is the amount of long-term debt. MVE is the market value of equity

[9]Barclay, Morellec, and Smith (2006) present evidence that book-leverage is backward looking while market leverage is forward looking

estimated as the product of year-end common shares outstanding (CSHO) and year-end common share stock price (PRCC_F). The estimated mean and median of market leverage are about 21% and 12% respectively. The distribution of market leverage ranges from about 1% in the 25^{th} per centile to about 35% in the 75^{th} per centile[10].

Figure [1] presents the time series evolution of mean market leverage over the sample period. Observe that the first vertical reference line represents the initial introduction of anti-recharacterization laws in Texas and Louisiana in 1997, and the second vertical reference line represents the introduction of the laws in Nevada in 2005. Figure [1] demonstrates that the average market leverage of "treated group" (solid line) is higher than for the "control group" (long dash line). The figure suggests that increase in market leverage following adoption of anti-recharacterization laws is evidence of the exogenous increase in debt capacity and access to external financing. The graphical evidence supports the hypothesis that anti-recharacterization laws reduce uncertainty surrounding the value of collaterized assets and thus lead to an increase firms' debt capacity. Notice also that for the pre-adoption period, there is no discernible difference between "treated" firms and "control" firms. This result is crucial as it satisfies the common or parallel trend assumption in difference-in-difference setting. That is, mean market leverage for adopting states (treatment firms) and non-adopting states (control firms) would follow the same time trend in the absence of anti-recharacterization laws. Overall, Figure [1] suggests that there is no difference between the "Treated" firms and "Control" firms prior to the introduction of the laws. As such Figure [1] suggests that the adoption of anti-recharacterization laws is associated with increase in debt capacity.

[INSERT FIGURE 1 ABOUT HERE]

[10]Distribution of leverage is consistent with the observation that about 10% of U.S. firms in Compustat universe have zero debt-Strebulaev and Yang, 2013.

4 Empirical Results

4.1 Anti-recharacterization Laws, Debt Capacity and Debt Policy

4.1.1 Identifying the Effects of Laws Adoption on Market Leverage

To examine the effects of anti-recharacterization laws on firms' financing choices and debt capacity, I estimate the reduced form difference-in-difference regression outlined in Equation [1] above. Selection of independent variables (**X**), is motivated by prior literature (Lemmon, Roberts and Zender, 2008, Frank and Goyal, 2009). The variables that extant literature has documented as highly correlated to leverage include: size, profitability, tangibility and market-to-book ratio. All variables are constructed as defined in section 2.1 above. Following Petersen (2009), all standard errors in Equation [1] are clustered at firm-level.

Table [2A] presents the regression estimates from Equation [1] above. Models [1,2] present panel regression estimates in which market leverage is the firm's outcome variable of interest and the anti-recharactization laws dummy is the sole independent variable. Market leverage is estimated as in Equation [2] above. The coefficient of the dummy variable "Law" is positive and statistically significant at 1% level. The result suggests that "treated" firms significantly increase market leverage following state adoption of anti-recharacterization laws. The results support the notion that anti-recharacterization laws, by minimizing information asymmetry and reducing uncertainty regarding the value of collateralized assets, result in increase in debt capacity. Additionally, anti-recharacterization laws also reduce demand for insurance (Favara, Gao and Gianneti, 2018), since these laws enhance the ability of creditors to repossess collateral or pledgeable assets during bankruptcy.

Models [3,4] control for firm-specific factors that are highly correlated with the firm's leverage decision. Observe that even after controlling for these factors, the estimated coefficient of the dummy variable "Law" is positive and statistically significant across all models. Economically, the adoption of anti-recharacterization laws is associated with an increase of 6.05% over mean market leverage. The estimated coefficients of firm-specific factors are generally consistent with those reported in prior literature (Rajan and Zingales,

1995). Profitability is negatively related to market leverage. The result is consistent with the notion that highly profitable firms find it less desirable to issue debt since such additional debt tends to finance dividend issues rather than to increase equity (Hennessy and Whited, 2005). Tangibility is positively related to market leverage. This is because tangibility is a proxy for collateral, which minimize information asymmetry between creditors and lenders. Tangibility also minimizes agency costs associated with risk shifting. Firms with large a collateral base tend to be more valuable during financial distress and liquidation. Creditors are more willing to supply loans and extend additional credit to firms with a large collateral base. Additionally, firms that tend to have greater leverage tend to employ a higher proportion of secured debt financing in their capital structure (Giambona, Mello and Riddiough, 2012).

Size is positively related to market leverage[11]. Large firms tend be more diversified; as such, firm size serves as an inverse proxy for bankruptcy. Large firms also tend to have easier access to external financing than smaller firms (Gertler and Gilchrist, 1994). Large firms are also more active in issuing debt (Frank and Goyal, 2015) and are more likely to finance projects with funds raised in capital markets (Bougheas et al., 2006). On the other hand, small firms tend to borrow significantly from banks since the market perceives such firms to be generally opaque and risky. In general, small firms tend to have a restricted access to public debt and are constrained in their ability to issue debt securities. Note also that large debt issues by small firms might significantly increase the probability of financial distress. As a result, small firms tend to be highly sensitive to securities issuance costs. Market-to-book ratio is an indicator of whether a firm is a value firm. Growth firms tend to have significantly greater market value than book value,that is, higher MB. The estimated coefficient of MB is negative but not robust.

In models [5,6] balance sheet leverage is the dependent variable[12]. Balance sheet leverage

[11] "Large firms ....have easier access to public debt markets and face fewer obstacles in accessing securities markets". Frank and Goyal (2015).

[12] Welch (2010) argues that balance sheet leverage is a robust measure as it predicts more leverage when either the firm's financial or non-financial liabilities are higher, and that unlike financial debt to asset ratio,

is estimated as total liabilities scaled by total assets. The coefficient estimates of firm factors are generally consistent with those reported in models [1-4], but my results in models [5,6] are more subtle than those reported in Li, Whited and Wu (2016). Interestingly, the MB coefficient is positive, a result which is consistent with the notion that growth firms tend to have higher leverage relative to value firms.

Note that due to the right-skewed nature of leverage distribution[13], the coefficient estimates reported in Table 2[A] might be estimating conditional mean. That is, not only is the underlying distribution affecting the coefficient estimates, but factors such as asymmetries and sample selection might bias the estimates and lead to misinterpretation of the source(s) of identification (Frank and Goyal, 2015). In order to minimize this bias, I re-estimate the difference-in-difference regression model {Equation [1]} using quantile regression analysis[14]. The advantage of using quantile regression analysis is that it takes into account data distributional features other than the mean. In addition, quantile regression estimators tend to be consistent under weaker stochastic assumptions than estimates from using least squares estimation (Manski 1975, Powell 1984).

Model [1] of Table 2[B] replicates model [4] of Table 2[A]. Models [2,3,4] report estimates for 25^{th}, 50^{th} and 75^{th} per centile respectively. The results from the quantile regressions show the marginal effect of anti-recharacterization laws on market leverage conditional on various points in the distribution. The results are generally consistent with the estimates reported in Table 2[A]. The coefficient estimates for the 25^{th} and the 50^{th} per centile suggest that firms with higher debt capacity tend to increase market leverage significantly following the state's adoption of anti-recharacterization laws. Nevertheless, the coefficient estimate of the dummy variable "Law" for firms in the 75^{th} per centile of leverage distribution is not statistically significant, in part because highly levered firms have a lower capacity for additional external financing. These firms are already operating either close to or within the zone of financial

neither market leverage nor balance sheet leverage declines with non-financial liabilities. This suggests that market leverage is a robust measure of firms leverage.

[13]Ref. Table [1], reported mean(median) of leverage 0.234(0.181).

[14]See Cameron and Trivedi (2010), Koenker and Basset (1978), Koenker and Hallock (2001) for detailed discussion on quantile regression analysis.

distresss. Therefore, such firms on average have a higher probability of passing up otherwise positive net present value investment opportunities or projects (Myers, 1984). That is, the marginal benefit from an additional dollar of external financing (as a result of exogenous increase in debt capacity due to the state adoption of anti-recharacterization laws) is less than the marginal cost.

[INSERT TABLE 2[A] & TABLE 2[B] ABOUT HERE]

4.1.2 External Financing Choice: Short-term Debt vs. Long-term Debt

So far, the estimates reported in Table 2[A&B] demonstrate that the adoption of anti-recharacterization laws is positively associated with increase in debt capacity. However, the average firm debt consists of short-term and long-term debt. Short-term debt tends to consist mostly of bank debt while long-term debt tends to reflect long-term liabilities and obligations from the market. Hence, short-term debt financing serves as a robust proxy for bank financing and long-term debt financing serves as a robust proxy for market or public debt (Boughes, Mizen and Yalcin, 2006). The main goal of this section is to address the concern that the effects of anti-recharacterization laws on debt capacity might be heterogeneous and dependent on source of external financing: Does the adoption of anti-rechracterization laws affect debt structure? The financial flexibility that comes from substituting short-term debt for long-term debt financing reflects the option-value of unused debt capacity[15]. As access to external financing improves, firms substitute away from costly forms of external financing. In order to test this conjecture, I estimate the effects of anti-recharacterization laws on financial choices of firms using the following reduced form difference-in-difference regression model {augmented form of Equation [1]}:

$$Leverage_{i,s,t} = \alpha_i + \beta_1 Law_{i,s,t} + \mathbf{X'_{it}}\psi + \gamma Leverage_{i,s,t-1} + \eta_i + \delta_t + \epsilon_{it} \qquad (3)$$

Where $Leverage_{i,s,t}$ is either short-term debt or long-term debt scaled by total assets. Equation [3] includes initial or previous period leverage. The inclusion of initial leverage

[15]See DeAngelo, DeAngelo and Whited (2011) for discussion on the option value of debt capacity.

addresses two concerns: [i] Managers might be concerned about the long-term equilibrium level of leverage, which might lead to low explanatory power (Lemmon et al., 2008); [ii] Extant literature has documented that firms tend to rebalance leverage less frequently (Leary and Roberts, 2005). These two concerns imply that not including initial or lagged leverage in the model might lead to bias estimates. All standard errors are clustered at the firm-level.

Table [3] evaluates the response of financial choices to the state adoption of anti-recharacterization laws controlling for firm specific characteristics. Intuitively, we would expect that as creditors' rights strengthen, firms would be more likely to substitute short-term debt for long-term debt financing. This is because short-term debt tends to consist mainly of bank acceptances and overdrafts, and notes payable to banks and other intermediaries. While long-term debt tends to consists of capitalise leases, commercial paper, debentures, convertible debt, subordinated debt and bonds-and-notes[16]. This implies that short-term debt tends to be mainly bank finance and long-term debt consisting mainly of market or public debt. On average, bank debt is costlier due to costly state verifications (Diamond 1984, 1991). Anti-recharacterization laws enhance repossession of pledgeability assets during bankruptcy or financial distress, which results in increase in debt capacity. Firms respond to this increase in access to debt financing by substituting between bank debt financing and market debt financing.

The results in Table [3] are strongly in support of the above prediction. Models [1-3] present estimates in which the dependent variable is long-term debt scaled by total assets. The coefficient of the dummy variable "Law" is positive and statistically significant across all three models. These results suggest that the adoption of anti-recharacterization laws- that is, strengthening of creditors rights-is positively related to long-term (market) debt financing.

The results are also consistent with the notion that firms with collaterized assets have greater access to long-term debt financing. In addition, since the laws enhance creditors ability to repossess pledgeable assets, firms with a high collateral base significantly increase the fraction of long-term debt in their capital structure. Economically, the adoption of anti-

[16]See Welch (2010) for detailed discussion on balance sheet components of total liabilities.

recharacterization laws is associated with an increase of 3.5% in long-term debt financing. Models [4-6] present estimates where the dependent variable is the ratio of short-term debt to total assets. The coefficient of the dummy variable "Law" is negative and statistically significant across all models. Economically, the adoption of anti-recharacterization laws is associated with a decline of 7.2% in short-term debt financing. This result suggests that as creditors' rights improve, firms tend to substitute away from costly bank debt financing and instead increase the fraction of market debt in their capital structure. This result is consistent with the observation that as the value of collateral increases, firms tend to reduce short-term debt financing (Bougheas et al., 2006), since collateral is associated with increased access to market debt.

Overall, the results in Table [3] demonstrate that the effects of anti-recharacterization laws are not only limited to increase in leverage but the laws also affect the dynamic relationship between short-term debt and long-term debt financing. On average, firms respond to the adoption of anti-recharacterization laws by reducing the fraction of short-term debt and increasing the fraction of long-term debt in their capital structure.

[INSERT TABLE 3 ABOUT HERE]

4.2 Anti-recharacterization Laws and Financing Activities: Securities Issuance Decisions

4.2.1 Financing Activity: Effects of Laws on Debt Issuance

Does debt issuance behavior vary with the adoption of anti-recharacterization laws? Since anti-recharacterization laws enhance the value of pledgeable assets and facilitate swift seizure of collateral during bankruptcy; we would expect that the laws are positively related to debt issuance. Anti-recharacterization laws effectively transfer some control rights from borrowers to creditors. Hence, creditors are more willing to extend credit to firms in adopting jurisdictions, which increases firms' access to external financing. That is, the laws induce financial flexibility as a result of increase in the option-value of unused debt capacity. Ceteris paribus, firms would response to this exogenous change in debt capacity by issuing debt.

Table [4] presents estimates in which debt issuance is the dependent variable. Debt issuance is estimated as the sum of issuance of long-term debt (dltr) and changes in current debt (dlchh) scaled by total assets[17]. Models [1&2] present panel regression estimates of debt issuance on an indicator for the state adoption of anti-recharacterization laws, controlling for firm specific characteristics. Consistent with the above prediction, the coefficient of the indicator variable "Law" is positive and statistically significant, suggesting that on average firms tend to issue more debt following the adoption of anti-recharacterization laws.

Nevertheless, there might be some concerns that the reported effects of anti-recharacterization laws on debt issuance might simply reflect the effects of the laws on changes in leverage. First, this cannot be the case, since changes in leverage reflects changes in debt capacity. The first reassuring evidence comes from univariate analysis. The correlation between debt issuance and change in leverage is about 26% in the data. To further address this issue, I use change in leverage as the dependent variable in models [3&4] of Table [4]. The coefficient of the dummy variable "Law" is positive and statistically significant at the 1% level. However, observe that the coefficient estimates of the dummy variable "Law" in models [1&2] are statistically different from the coefficients estimates reported in models [3&4]. The results indicate that changes in total leverage reflect changes in debt capacity. Thus, the results in models [3&4] supports the notion that the adoption of anti-recharacterization laws is positively related to debt capacity. The results in models [1&2] suggest that improvement in creditors' rights leads to increase in debt issuance.

[INSERT TABLE 4 ABOUT HERE]

How does security issuance vary with the adoption of anti-recharacterization laws? Extant literature documents that frequency of security issuance is not only prevalent but might also reflect special features of the issuing firm (Billet et al. 2011, Ritter and Huang, 2018). That is, firms that are frequent issuers might be very different from firms that are passive issuers. Hence, the effects of state adoption of anti-recharacterization laws on securities issuance might be heterogeneous across firms. Firms that actively issue debt are

[17]Debt issuance definition is consistent with Frank and Goyal, (2015).

more likely to increase debt issuance following the adoption of the laws.

In Table [5] firms are sorted into active debt issuers and passive debt issuers. In models [1-4] active firms are classified as those firms that have a debt issuance in excess of 5% of total assets, otherwise a firm is classified as passive debt issuer. To ensure that the above cut-off is not too restrictive, models [5-8] present estimates for which active debt issuers are classified as those firms that issue debt in excess of 3% of total assets[18]. On the other hand, passive debt issuers are those firms that issue debt less than 3% of firm total assets. Consistent with the above prediction, I find that the coefficient estimate of active debt issuers is positive, statistically significant and greater in magnitude than the coefficient estimate of passive debt issuers. The results suggest that the effects of anti-recharacterization laws on debt issuance decision is more profound amongst firms that are active issuers of debt. The combined results of Tables [7&8] suggest that the likelihood of debt issuance increases with the adoption of anti-recharacterization laws and that this result is mostly driven by firms that proactively rebalance leverage.

[INSERT TABLE 5 ABOUT HERE]

4.2.2 Financing Activity: Effects of Laws on Equity Issuance

The results in Tables [2-5] demonstrate that firms increase both leverage and debt issuance following the adoption of anti-recharacterization laws. Intuitively, we would expect that as access to leverage increases, firms might reduce not only equity issuance but also the frequency of equity issuance. This is partly because large equity issuance is costlier than debt issuance of similar size. In addition, the market react differently to equity issuance than debt issuance. Equity issuance is generally associated with overvaluation. Indeed, the announcement of equity issuance is associated with stock decline (Asquith and Mullins, 1986, Bayless and Chapkinsky 1996, Loughran and Ritter, 1995, Ritter, 2002)[19]. While equity issuances are followed by significantly lower raw returns, the announcement of public

[18]Sorting is similar to Frank and Goyal (2015) , Ritter and Huang (2018)

[19]Billett et al (2006)"Numerous studies document substantial underperformance during the three-five years following security issuances, issuing firms...underperforms the relevant benchmarks by 4% to 10%."

debt issuance is associated with non-zero to slightly positive returns (Jung, Kim and Stulz, 1996). Note also that frequent issuers of equity tend to not only have lower book-to-market ratios, but are also less profitable. Since anti-recharacterization laws enhance access to external financing, firms might subsitute away from issuing costly equity. That is, the adoption of anti-recharacterization laws might induce substitution effects amongst financial choices. Ceteris paribus, we would expect a negative relationship between adoption of anti-recharacterization laws and equity issuance for firms incorporated in adopting jurisdictions.

To test whether firms proactively reduce equity issuance following the adoption of anti-recharacterization laws, I follow a similar approach to Denis and McKeon (2012). To this effect, I employ sale of common and preferred stocks (SSTK) as the proxy for equity issuance. SSTK is a robust proxy as it takes into account both active external equity offerings to outside investors and proceeds from exercise of employee options. Equity issuance is estimated as sale of common and preferred stocks scaled by total assets. Table [6] presents panel regression model estimates predicting the effects of anti-recharacterization laws on equity issuance. Models [1&2] control for firm size, profitability, tangibility and market-to-book. The coefficient of the indicator variable "Law" is negative and statistically significant at the 1% level. The results are consistent with the above prediction and establish that firms reduce equity issues after state adoption of anti-recharacterization laws. Models [3&4] control for additional covariates; the results are consistent with those reported in models [1&2]. Equity issuance is negatively correlated with state adoption of anti-recharacterization laws.

[INSERT TABLE 6 ABOUT HERE]

The next step is to consider the frequency of equity issuance. It could be the case that firms that actively issue equity behave differently from firms that infrequently or passively issue equity. To be consistent with prior literature (Frank and Goyal, 2015, Ritter and Huang, 2018), a firm is classified as an "Active" equity issuer if its sale of common and preferred stocks is greater than 5% of total assets; otherwise the firm is classified as a"Passive" equity issuer.

Table [7] presents estimates in which firms are sorted by whether they are "Active" or

"Passive" equity issuers. Models [1&3] present estimates for firms that proactively issue equity. Models [2&4] present estimates for passive issuers of equity. The results demonstrate that firms that proactively issue equity reduce equity issuance following the adoption of anti-recharacterization laws. These findings show that the estimates reported in Table [6] are mostly driven by proactive equity issuers.

Overall, the results in Table [7] are consistent with the notion that proactive equity issuers tend to have greater and pressing needs for external financing. Indeed, prior literature finds that immediate need for financing due to squeeze in internal funds is a significant predictor of equity issuance (Ritter and Huang, 2017). Additionally, since the adoption of anti-recharacterization laws is associated with increase in access to external financing, proactive issuers reduce equity issuance more than passive issuers. This is because it is more costly to issue equity than to issue debt, and active equity issuers benefit more from the easier access to debt financing following anti-recharacterization laws. The results are consistent with the notion that even a small divergence in the costs between equity and debt issuance significantly affects firms' securities issuance decisions. In such cases, firms tend to significantly issue debt over equity.

[INSERT TABLE 7 ABOUT HERE]

5 Robustness

5.1 Endogeneity and Falsification Test: Placebo Effect

One concern is that the documented effects of anti-recharacterization laws on debt capacity and financing activities might simply be due to some action(s) other than the adoption of the laws. To address this concern, I closely follow the placebo test outlined in Angrist and Kruger (1999)[20]. I start by using a different subsample of firms incorporated in those states that have not adopted anti-recharacterization laws. In my setting, the treatment is the adoption of anti-recharacterization laws and the "treatment effects" are: [1] Increase in market leverage,

[20]See Balakrishan, Billings, Kelly and Ljungvist, (2014) for a similar setting in the context of liquidity

[2] Decline in equity issuance and [3] Increase in debt issuance. In order to infer any causal relationship between the adoption of anti-recharacterization laws and the above treatment effects, the placebo test should not yield similar "treatment effects". Otherwise, the outlined treatment effects might be attributable to either ommitted variable(s) problem or some unobserved action(s), but not to anti-recharacterization laws.

In implementing the placebo tests, I first create a matched sample of firms (placebo group) incorporated in a state of similar characteristics to the adopting state. These characteristics includes similar population size, location proximity and economic activity (GDP) to the state that has adopted anti-recharacterization laws. To create the subsample, I first begin by creating a subset of states of similar characteristics as the state that has adopted anti-recharacterization laws; I then randomly selects a state from this subset. This process is then repeated for each of the seven states under study. This selection process results in a new subsample- which serves as the "control group". In the new subsample, Louisiana is replaced by Kentucky, Virginia is replaced by Washington, Alabama is replaced by South Carolina, Delaware is replaced by Montana, Texas is replaced by Michigan, South Dakota is replaced by North Dakota and Nevada is replaced by Arkansas. The key idea here is that if the documented treatment effects are attributable to a placebo effect, we would expect to observe similar treatment effects in the subsample- that is in the states that have not adopted anti-recharacterization laws. In order to estimate this effect, I create a dummy variable: "Placebo law". The dummy takes a value equal to "1" for firms incorporated in: Kentucky and Michigan after 1997, in North Dakota after 2003, in Washington after 2004, in Montana after 2002, in South Carolina after 2001 and in Arkansas after 2005. Otherwise, "Placebo Law" equals zero.

The results in Table [8] indicate that the coefficient of the dummy variable "Placebo Law" is statistically insignificant. The results demonstrate that the "placebo group" does not yield the same treatment effects as the "treatment group". That is, the effects attributable to the staggered adoption of anti-recharacterization laws are <u>not</u> observable in the "control group". The absence of "treatment effects" in the placebo group is strong

evidence that the documented treatment effects are indeed mostly driven by the state adoption of anti-recharacterization laws and not by potential confounding effects or omitted variable(s) problem.

[INSERT TABLE 8 ABOUT HERE]

5.2 Legal Challenge(s): Federal Laws vs. State Laws

In 2003 anti-recharacterization laws were challenged in the federal courts. In the case of, *Reaves Brokerage Company Inc. v. Sunbelt Fruit & Vegetable Company*, the federal court recharacterized the debtor's transfer. The creditors were unable to repossess collateral during this specific bankruptcy case. The court's decision increased uncertainty regarding the viability and enforceability of state-level anti-recharacterization laws. However, note that the federal court's ruling in this case did not completely overturn the state-level anti-recharacterization laws; the ruling simply set a precedent upon which future cases might challenge the state's anti-recharacterization laws. Indeed, in the 2016 case of *Pacifica L 51 LLC vs. New Investments Inc.*, the 9^{th} circuits ruled that "...a debtor may "cure" a default only by fulfilling the debtor's obligations under its loan agreement, including payment of interest at a higher post-default rate"[21,22].The key concern here is that the potential challenges to the laws might weaken the effects of anti-recharacterization laws, which would weaken the documented "treatment effects".

To address this concern, I create a dummy variable "$Law_3states$" which takes a value of "1" if a state passed anti-recharacterization laws before 2002, and equals to zero if otherwise. This means that there are only three states under study, namely Texas and Louisiana, which passed anti-recharacterization laws in 1997, and Alabama, which passed the laws in 2001. In this case, the "treated firms" are those incorporated in these three states.

The estimates reported in Table [9] below are generally consistent with the estimates reported in Tables [2-7]. The results in models [1-6] suggest that firms incorporated in these

[21]For details see https://cdn.ca9.uscourts.gov/datastore/opinions/2016/11/04/13-36194.pdf

[22]https://www.quarles.com/christopher-combest/publications-and-presentations/lenders-are-entitled-to-default-interest-in-chapter-11-ninth-circuit/

three states increased market leverage, increased debt issuance and decreased equity issuance following state adoption of anti-recharacterization laws. Observe also that the reported coefficient estimates of "$Law_3states$" are higher than those reported for all seven states. These results are consistent with the notion that changes in market leverage and securities issuances are a product of changes in both the value of collateral and debt capacity (Li, Whited and Wu, 2016).

[INSERT TABLE 9[A&B] ABOUT HERE]

5.3 Balance Sheet Expansion: Growth in Firm-Level Covariates

One potential concern with the above findings is that controlling for firm-level covariates does not take into account the effects of changes in the firm's determinants. The key concern here is that the documented "treatment effects" might be attributable to mechanical balance sheet expansion and not to the passage of anti-recharacterization laws. Table [10] reports estimates controlling for changes in covariates and the interaction of these changes with the indicator variable "Law". Models [1&2] document that even after controlling for changes in covariates, the coefficient of the"Law" dummy is still positive and statistically significant at the 1% level.

Additionally, it could be the case that changes in covariates will have a more pronounced effect on changes in market leverage. To address this concern, change in market leverage is the dependent variable in models [3&4]. Consistent with the above results, the coefficient of "Law" is positive and statistically significant at 1% level. The estimates in models [1-4] demonstrate that the positive effect of the state adoption of anti-recharacterization laws on market leverage is robust to controlling for balance sheet expansion.

In models [5&6] equity issuance is the dependent variable. The coefficient of the indicator variable "Law" is negative and statistically significant at the 1% level. The estimates are consistent with those reported in Table [6] above. Observe that the coefficient of change in profitability is negative, which is consistent with Frank and Goyal (2015). Contrastingly, the interaction of changes in profits and the indicator "Law" is

positive and statistically significant at 1% level. Observe also that the interaction term between size and the indicator variable "Law" is negative and statistically significant at the 1% level. This results suggest that large firms are less likely to issue equity even after the state adoption of anti-recharacterization laws. Large firms tend to be less financially constrained since they have access to external financing. Intuitively, we would expect that following state adoption of anti-recharacterization laws, financially unconstrained firms would reduce equity issuance. The adoption of laws enhances access to additional debt financing. Additionally, since equity issuance is more costly, unconstrained firms are more likely to substitute away from equity financing.

[INSERT TABLE 10 ABOUT HERE]

To address this concern, I sort firms based on financial constraints measure. I employ the Whited-Wu index (2006)- WWI henceforth- as the measure of financial constraints. Table [11] reports estimates in which firms are sorted based on WWI. Firms whose index value is above median are classified as "High"- these firms are more likely to be financial constrained. meanwhile firms below median WWI are classified as "Low"- these firms are less likely to be financial constrained. As expected, the empirical results in Table [11] support the above conjecture. The results in models [1&3] demonstrate that the negative effect of the adoption of anti-recharacterization laws on equity issuance is mainly driven by financially unconstrained firms. Financially unconstrained firms are more likely to access external debt financing, especially post state adoption of anti-recharacterization laws. There is no evidence that financially constrained firms reduce equity issuance.

[INSERT TABLE 11 ABOUT HERE]

5.4 Accounting for the Effects of Anti-recharacterization laws on Equity Repurchases

So far, the results demonstrate that firms on average reduce equity issuance following the state adoption of anti-recharacterization laws. The next step is to establish whether the adoption of these laws affects stock repurchases. Anti-recharacterization laws are positively

associated with market leverage and debt issuance, implying that firms are more likely not only to reduce equity issuance but might also increase stock repurchases.

Table [12] considers the effect of anti-recharacterization laws on equity repurchases. Equity repurchases are estimated as purchase of common stock (prstkc) scaled by total assets. Models [1&2] report results from regressions of equity repurchase on the indicator variable "Law", controlling for firm size, profitability, MB and tangibility. Columns [3&4] present estimates controlling for changes in firm size, changes in profitability, changes in MB and changes in tangibility. Models [4&5] control for interaction terms in addition to firm-level controls. The results confirm the above prediction and establish that firms increase stock repurchases after the state adoption of anti-recharacterization laws.

[INSERT TABLE 12 ABOUT HERE]

5.5 Which Firms Respond More Strongly?

In this section, I explore cross-sectional variation in firms' responses to the adoption of anti-recharacterization laws. The results in Table [2] demonstrate that on average firms increase market leverage following the state adoption of laws. However, financially constrained firms might behave very differently from their unconstrained counterparts (Ershin 2017, Chu 2018). Following state adoption of anti-recharacterization laws, financially unconstrained firms are more likely to reduce costly short-term debt financing and financially constrained firms are less likely to reduce short-term debt. This is because anti-recharacterization laws strengthen creditors' rights, which enhance the value of pledgeable assets in place. As access to external financing impoves, unconstrained firms face lower trade-off costs and are therefore more likely to substitute between market debt and bank debt financing. As such we would expect financially unconstrained firms to reduce costly short-term debt, which tends to be bank financed.

On the other hand, financially constrained firms have improved access to external financing, but this improved access is conditional on the value of pledgeable assets in place. Financially constrained firms tend to have lower collateral assets in place relative to their

unconstrained counterparts. Hence, the improved access to external financing implies that financially constrained firms might increase market leverage but might not reduce costly short-term debt. That is, we would expect to observe imperfect substitutability between market debt and bank debt for financially constrained firms. Overall, following the enactment of anti-recharacterization laws, we expect that unconstrained firms would reduce short-term debt and financially constrained firms would increase market leverage.

In Table [13] firms are sorted based on the Whited-Wu index (2006). Higher index values are associated with higher need for external financing. The dependent variable in models [1&2] is market leverage and the dependent variable in models [3&4] is long-term debt scaled by total assets. In models [5&6] the dependent variable is short-term debt scaled by total assets. The results in Table [13] confirm the conjecture that financially constrained firms increase market leverage and unconstrained firms reduce costly short-term debt financing. As access to debt financing improves, unconstrained firms substitute between market debt and bank debt.

Note also that the easier repossession of pledgeable assets following the enactment of anti-recharacterization laws implies that creditors are more willing to provide debt financing to financially constrained firms. Overall, the results indicate that following the adoption of anti-recharacterization laws, constrained firms significantly increase market leverage while unconstrained firms significantly reduce short-term debt. The results support the notion that strengthening creditors' rights facilitates lending activities and results in imperfect substitutability between public debt and bank debt. These results are consistent with Chu (2018) finding that "...financially constrained firms value additional debt capacity due to increased ability to repossess collateral."

[INSERT TABLE 13 ABOUT HERE]

5.6 Accounting for the Effects of the 2008 Financial Crisis

One potential concern is that some of the effects attributable to the state adoption of anti-recharacterization laws might simply be picking up the adverse effects of the 2008 financial

crisis. This conjecture is partly because there is quite an overlap between the post-crisis period and the post-adoption period of anti-recharacterization laws. In order to address this concern, I employ a difference-in-difference strategy in which I compare the variable(s) of interest before and after the crisis. The coefficient "After" is a dummy variable that takes the value of "1" for the years after 2008 and zero if otherwise.

Table [14] presents estimates with the dummy variable "After" as an additional control. In models [1&2], I re-examine the effects of anti-recharacterization laws on market leverage controlling for the effects of the 2008 financial crisis. The results show that the dummy variable "Law" is positively related to market leverage. The effects are statistically significant at the 1% level. In models [3&4], the dependent variable is equity issuance. The coefficient estimate of "Laws" is negatively and statistically significant at the 1% level. Models [5&6] show that the coefficient of "Law" is positive and weakly significant. Observe that both the dummy "After" and the "After" are not significant in model [6]. The result is encouraging as it suggests that the insignificance in model [6] is mostly driven by clustering effect and not because the effect of the financial crisis subsumes the effect of the adoption of the anti-recharacterization laws. Overall, the results in Table [13] demonstrate that the effects of state adoption of anti-recharacterization laws on market leverage and equity issuance is robust to accounting for the effects of the financial crisis.

[INSERT TABLE 14 ABOUT HERE]

5.7 Accounting for the Availability of Internal Funds

Under the pecking order theory (Myers, 1984), firms should prefer internal financing over external financing. If additional funding is required, firms should first issue market debt before issuing equity. This is partly because firms on average tend to face higher transaction costs in the case of equity and debt financing than using straight cash. The key idea here is that external financing is costly. Indeed, extant literature finds that firms tend to raise funds only when they are squeezed for cash. McKeon and Denis (2012) document that urgent demand for cash is a significant determinant of debt issuance. Ritter and Huang (2017) find

that about 67% of issuers in their sample would have run out of cash by the end of the fiscal year if they had not issued securities. And that immediate need for cash is the most significant predictor of debt issuance. DeAngelo, DeAngelo and Stulz (2010) find that about 63% of firms, in their sample, would have run out of cash in the preceding year if they did not raise external capital. Overall, firms seem to trade-off the benefit of security issuance against the information sensitivity cost(s) associated with security issuance. Hence, ceteris paribus firms with high information asymmetry should have stronger preference for cash financing. In the context of creditors' rights laws, this conjecture implies that firms with significant cash might be less responsive to the state adoption of anti-recharacterization laws.

Additionally, higher cash holdings firms might prefer to pay down existing debt, which might further weaken the "treatment effects" from the adoption of anti-recharacterization laws. Prior research finds that the fraction of pledgeable assets declines with increase and availability of internal funds (Eisfeldt and Rampini, 2009). As such, we would expect a negative relationship between cash and debt capacity. That is, we expect a negative correlation between cash and market leverage, and a negative correlation between cash and debt issuance. The conjecture effectively implies that firms with higher internal funds are more likely to underreact to the staggered adoption of anti-recharacterization laws.

In Table [15], in addition to controlling for determinants of leverage, cash is also an independent variable in the regression. Cash is defined as cash and cash equivalent market securities (CHE) scaled by total assets. Consistent with the above conjecture, the coefficient estimate of cash is negative across all models. The negative and statistically significant coefficient of cash indicates that internal funds are an important determinant of market leverage and financing activity. Prior literature has documented that firms with internal capital tend to use such funds primarily for debt reduction (Byuon 2008, Denis and McKeon 2012).

In Table [15] panel [B], I test whether high cash holdings firms behave differently from low cash holdings firms after the state adoption of anti-recharacterization laws. The results confirm the notion that firms with high cash prefer or would rather reduce market leverage

and reduce debt issuance than firms with low cash. The interaction term "LawxCash" captures the joint effect of cash and adoption of anti-recharacterization laws. In models [1-4], the coefficient estimate of the interaction term is negative and statistically significant at 1% the level. The results demonstrate that firms incorporated in states with anti-recharacterization laws that have high cash holdings decrease market leverage.

Observe also that the interaction effects do not subsume the documented "treatment effects" attributable to the passage of anti-recharacterization laws. The coefficient estimate of the dummy variable "Law" is positive and statistically significant at the 1% level. In models (7&8), debt issuance is the dependent variable. In this case, the coefficient of the interaction term while negative is not statistically significant, indicating that there is no evidence that firms with high cash reduce debt issuance activity. Overall, the results in Table [15] suggest that cash is an important determinant of financing choice(s). Nevertheless, even after controlling for cash holdings, the effects of anti-recharacterization laws on debt capacity and financing activities is robust.

[INSERT TABLE 15(A&B) ABOUT HERE]

6 Conclusion

The existing literature has documented contrasting results on the effects of stronger creditors' rights protection on external financing. Some papers find that stronger creditors' rights protection facilitates lending activities while others find that such rights depress secured lending. Most of these works focus on cross-country settings, legal origins and institutional comparisons, and as such suffer from the fact that cross-country differentials are significant enough to generate contradictory results. Hence, the relationship between stronger creditors' rights protection and firms' financing choices is still not well understood.

In this paper, I use the passage of anti-recharacterization laws by seven U.S. states as a quasi-natural experiment. The main motivation behind these laws is to enhance the ability of creditors to extract and repossess collateral during bankruptcy or during financial distress. Using a difference-in-difference methodology, I estimate the causal impacts of

anti-recharacterization laws on firms' financing choices and securities issuance. Firstly, I document that for firms incorporated in the adopting states, the passage of anti-recharacterization laws is associated with increase in access to external financing. The laws are positively related to market leverage. I also show that anti-recharacterization laws affect debt dynamics; firms substitute away from costly short-term debt financing towards long-term debt financing.

Second, I examine the effects of anti-recharacterization laws on firms' financing activities. I show that these laws are positively related to debt issuance and negatively related to equity issuance. These results are more pronounced amongst firms that are proactive issuers of securities. Proactive issuers of debt significantly increase debt issuance while proactive issuers of equity significantly reduce equity issuance. In summary, my results support the notion that stronger creditors' rights protection enhances lending activities and result in more efficient capital markets.

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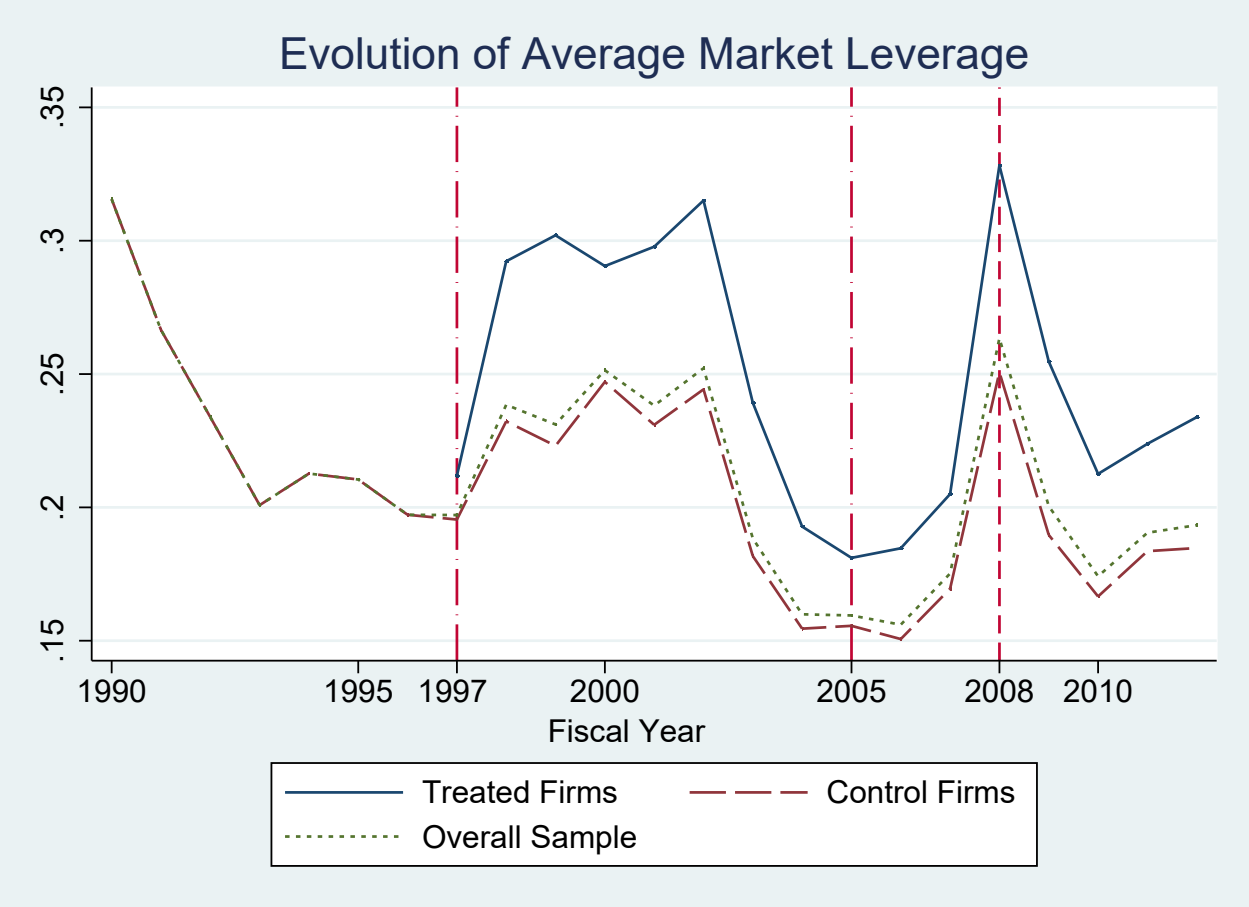

Figure 1: Evolution of Average Market Leverage

TABLE 1: Summary Statistics:

The sample comes from the annual Compustat files. The sample period is 1990-2012. I exclude financial firms (SIC 6000-6999) and utilities (SIC 4900-4999). Cash is estimated as cash and marketable securities adjusted by total assets. Investment is CAPX adjusted by total assets. Tangibility is estimated as property, plant and equipment scaled by total assets. Profits is estimated as operation income before depreciation adjusted by total assets. Leverage is estimated as debt in current period liability plus long-term debt scaled by total assets. Networking capital is estimated as networking capital net of cash scaled by total assets.Market leverage is estimated as in Equation [1]. Debt issuance is estimated as issuance of long-term debt(dltis) plus increase in current debt (dlcch). Equity issuance is estimated as sale of common stock. Equity purchase is estimated as the sale of common stock. Dividend dummy equals to 1 if a firm pays dividend in that fiscal year, otherwise it's equal to zero

	Mean	Median	Std. Dev	25^{th}	75^{th}
Summary Statistics:					
Cash	0.204	0.0954	0.247	0.0237	0.299
Ln(assets)	4.56	4.53	2.46	2.91	6.22
MB	2.30	1.52	2.43	1.09	2.45
Investment	0.067	0.039	1.001	0.016	0.0749
Equity Issuance	0.127	0.004	0.382	0.00	0.042
Tangibility	0.265	0.187	0.265	0.077	0.387
Leverage	0.234	0.181	0.231	0.0175	0.3747
Ln(Sale)	4.62	4.51	2.62	2.89	6.30
Profits	-0.056	0.093	1.02	-0.03	0.16
Debt Issuance	0.0701	0.00	0.296	0.00	0.08
Net Leverage	0.029	0.073	0.403	-0.22	0.313
Equity Repurchase	0.0138	0.000	0.0597	0.000	0.0211
Market Leverage	0.21	0.12	0.24	0.01	0.35
Dividend Dummy	0.328	0.000	0.469	0.000	1.000
Net working Capital	-0.283	0.041	25.5	-0.067	0.185
Acquisition Activity	0.089	0.000	9.9	0.000	0.004

TABLE 2A: Creditors Rights and Leverage:

This table presents results from a regression analysis where the dependent variable is market leverage in columns[1-4]. Market leverage estimation is as in Equation [1] above. The dependent variable is total leverage in columns[5-6]. The explanatory variables: Size is estimated as natural logarithms of total sales. Tangibility, profitability and MB are described in Table[1]. All estimations include firm fixed effects. Standard errors are clustered at firm-level. Within R^2 is reported.

	(1)	(2)	(3)	(4)	(5)	(6)
	Market Leverage	Market Leverage	Market Leverage	Market Leverage	Leverage	Leverage
Law	0.0297***	0.0297***	0.0127***	0.0127*	0.0246**	0.0246
	(8.93)	(4.03)	(3.81)	(1.75)	(2.22)	(1.42)
Size			0.0258***	0.0258***	0.0374***	0.0374***
			(43.71)	(22.12)	(19.12)	(3.78)
Tangibility			0.233***	0.233***	0.135***	0.135**
			(42.23)	(19.56)	(7.38)	(2.51)
Profitability			-0.00961***	-0.00961***	-0.426***	-0.426***
			(-9.42)	(-2.70)	(-126.02)	(-2.81)
MB			-0.000284***	-0.000284	0.00191***	0.00191*
			(-9.19)	(-1.17)	(18.68)	(1.92)
Constant	0.212***	0.212***	0.0394***	0.0394***	0.307***	0.307***
	(376.13)	(321.23)	(12.76)	(6.39)	(30.03)	(7.22)
Firm F.E	YES	YES	YES	YES	YES	YES
Clustered Std Errors	NO	YES	NO	YES	NO	YES
Year F.E	NO	YES	NO	YES	NO	YES
N	107,701	107,701	103,650	103,650	103,649	103,649
R^2	0.00162	0.00162	0.0997	0.0997	0.124	0.124

NOTE: t-statistics in parentheses:* p:0.10, ** p:0.05, *** p:0.01

TABLE 2B: Quantile Regression: Market Leverage:

This table presents results from quantile regression analysis where the dependent variable is market leverage in columns[1-4]. Equation [1] replicates results from Equation [3] in Table [2A]. Columns [2-4] presents estimates from quantile regression analysis. The explanatory variables: Size is estimated as natural logarithms of total sales. Tangibility, profitability and MB are described in Table[1]. All estimations include firm fixed effects. Standard errors are clustered at firm-level. Within R^2 is reported.

	(1)	(2)	(3)	(4)
	Market Levarage	Market Leverage	Market Leverage	Market Leverage
		Quantile	**Regression**	**Estimates**
Law	0.0127*	0.00390***	0.00615**	-0.000517
	(1.75)	(3.85)	(2.23)	(-0.10)
Size	0.0258***	0.00464***	0.0143***	0.0249***
	(22.12)	(10.83)	(73.55)	(38.63)
Tangibility	0.233***	0.171***	0.337***	0.443***
	(19.56)	(45.45)	(81.25)	(65.76)
Profitability	-0.00961***	-0.00791***	-0.0193***	-0.000963
	(-2.70)	(-7.16)	(-12.33)	(-0.27)
MB	-0.000284	-0.00191***	-0.00312***	-0.000941
	(-1.17)	(-3.66)	(-10.30)	(-0.67)
Constant	0.0394***	-0.0181***	-0.00798***	0.0991***
	(6.39)	(-5.66)	(-6.97)	(17.40)
Firm & Year F.E	YES	NO	NO	NO
Clustered Std Errors	YES	NO	NO	NO
Robust Std Errors		YES	YES	YES
Regression Type	FE	$\mathbf{25^{th}\%}$	$\mathbf{50^{th}\%}$	$\mathbf{75^{th}\%}$
N	103,650	103,650	103,650	103,650
R^2	0.0997			
Pseudo R^2		0.056	0.102	0.078

NOTE: t-statistics in parentheses:* p:0.10, ** p:0.05, *** p:0.01

TABLE 3: Creditors Rights and Leverage:

This table presents results from a regression analysis where the dependent variable is long term debt in columns [1-3]. And the dependent variable is short-term debt in columns [4-6]. The explanatory variables: Size is estimated as natural logarithms of total sales. Tangibility, profitability and MB are described in Table[1]. All estimations include firm fixed effects. Standard errors are clustered at firm-level. Within R^2 is reported.

	(1)	(2)	(3)	(4)	(5)	(6)
	LT Debt	LT Debt	LT Debt	ST Debt	ST Debt	ST Debt
Law	0.00575***	0.00601***	0.00601*	-0.00452**	-0.00452**	-0.00452*
	(2.19)	(2.58)	(1.73)	(-2.50)	(-2.50)	(-1.93)
$LTDebt_{t-1}$		0.468***	0.468***			
		(159.49)	(73.94)			
$STDebt_{t-1}$					0.260***	0.260***
					(77.87)	(26.25)
Size	0.0151***	0.0109***	0.0109***	0.00158	0.00332***	0.00332***
	(32.58)	(25.28)	(15.93)	(4.69)	(9.92)	(6.03)
Tangibility	0.170***	0.127***	0.127***	0.0636***	0.0604***	0.0604***
	(39.33)	(32.13)	(17.51)	(20.32)	(19.66)	(11.21)
Profitability	-0.00449***	-0.0105***	-0.0105***	-0.0158***	-0.0190***	-0.0190***
	(-5.61)	(-12.62)	(-3.87)	(-27.25)	(-29.55)	(-4.75)
MB	-0.0000716***	-0.000913***	-0.000913***	-0.000751***	-0.000751***	-0.000751***
	(-2.95)	(-9.48)	(-4.20)	(-10.04)	(-2.01)	(-3.83)
Constant	0.0478***	0.00243	0.00243	0.0358***	0.0123***	0.0123***
	(19.77)	(1.04)	(0.63)	(20.40)	(6.79)	(4.15)
Firm F.E	YES	YES	YES	YES	YES	YES
Clustered Std Errors	NO	NO	YES	NO	NO	YES
Year F.E	NO	NO	YES	NO	NO	YES
N	103,650	96,890	96,890	103,650	96,890	96,890
R^2	0.0284	0.253	0.253	0.0135	0.0789	0.0789

NOTE: t-statistics in parentheses: * p:0.10, ** p:0.05, *** p:0.01

TABLE 4: Creditors Rights and Debt Issuance:

This table presents results from a regression analysis where the dependent variable is debt issuance in columns[1-2]. The dependent variable is change in total leverage in columns[3-4]. The explanatory variables: Size is estimated as natural logarithms of total sales. All explanatory variables are described in Table[1]. All estimations include firm fixed effects. Standard errors are clustered at firm-level. Within R^2 is reported.

	(1)	(2)	(3)	(4)
	Debt Issuance	Debt Issuance	$\Delta Leverage_{t,t-1}$	$\Delta Leverage_{t,t-1}$
Law	0.0189**	0.0189*	0.0117***	0.0117***
	(2.41)	(1.65)	(3.69)	(3.74)
Size	0.0149***	0.0149***	0.0185***	0.0185***
	(10.30)	(3.78)	(28.56)	(17.47)
Cash Flow	0.00417***	0.00417**	-0.0179***	-0.0179***
	(5.90)	(2.11)	(-13.15)	(-3.90)
NWC	-0.00352	-0.00352	-0.0138***	-0.0138*
	(-0.92)	(-0.24)	(-11.51)	(-1.65)
Investment	0.169***	0.169***	0.197***	0.197***
	(10.00)	(3.19)	(22.59)	(11.10)
Profitability	-0.0109***	-0.0109*	-0.00622***	-0.00622
	(-4.87)	(-1.67)	(-3.37)	(-0.72)
Tangibility	0.0137	0.0137	0.0920***	0.0920***
	(1.04)	(0.60)	(16.01)	(11.08)
MB	0.00283***	0.00283	-0.00176***	-0.00176***
	(14.20)	(1.07)	(-11.56)	(-3.73)
Market Cap	-0.00731***	-0.00731	-0.0131***	-0.0131***
	(-5.74)	(-1.64)	(-23.01)	(-13.05)
Acquisitions	0.000421*	0.000421	0.000422***	0.000422
	(1.68)	(0.97)	(2.71)	(0.62)
Dividend Dummy	0.00420	0.00420	-0.0118***	-0.0118***
	(1.10)	(0.87)	(-7.35)	(-6.06)
R&D	0.0195***	0.0195**	-0.000798	-0.000798
	(3.11)	(1.97)	(-0.28)	(-0.25)
Constant	0.00198	0.00198	-0.0293***	-0.0293***
	(0.26)	(0.18)	(-8.70)	(-6.25)
Firm F.E	YES	YES	YES	YES
Clustered Std. Errors	NO	YES	NO	YES
Year F.E	NO	YES	NO	YES
N	47,304	47,304	90,528	90,528
R^2	0.0123	0.0123	0.0355	0.0355

NOTE:t- statistics in parentheses * p:0.10, ** p:0.05, *** p:0.01

TABLE 5: Active vs Passive Debt Issuers:

This table presents results from a regression analysis where the dependent variable is debt issuance. Firms are sorted into active vs passive debt issuers. A firm is classified as active debt issuance if it issue debt in excess of 5% of the value of assets- columns[1-4] or if it issue debt in excess of 3% of total debt- columns[5-8]. The explanatory variables are explained in Table [1] above. All estimations include firm fixed effects. Standard errors are clustered at firm-level. Within R^2 is reported.

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Debt Issuance	Debt Issuance	Debt Issuance	Debt Issuance	Debt Issuance	Debt Issuance	Debt Issuance	Debt Issuance
		5%	**of Assets**					
					3%	**of Assets**		
	Active	Passive	Active	Passive	Active	Passive	Active	Passive
Law	0.0522**	-0.00484	0.0522*	-0.00484	0.0450**	-0.00304	0.0450*	-0.00304
	(2.41)	(-1.00)	(1.70)	(-1.19)	(2.50)	(-0.57)	(1.85)	(-0.68)
Size	0.0168***	-0.00125	0.0168**	-0.00125	0.0154***	-0.00200**	0.0154**	-0.00200
	(3.36)	(-1.49)	(2.38)	(-0.89)	(3.59)	(-2.24)	(2.15)	(-1.40)
Profitability	-0.0308***	0.00401*	-0.0308**	0.00401	-0.0417***	0.00717***	-0.0417**	0.00717
	(-3.94)	(1.81)	(-2.00)	(0.29)	(-6.01)	(3.08)	(-2.25)	(0.52)
Cash Flow	0.00217*	0.00512***	0.00217	0.00512	0.00292***	0.00108	0.00292**	0.00108
	(1.83)	(2.82)	(1.42)	(0.40)	(2.67)	(0.56)	(2.03)	(0.08)
NWC	-0.0652***	0.0189***	-0.0652**	0.0189	-0.0475***	0.0209***	-0.0475*	0.0209
	(-4.40)	(8.24)	(-2.14)	(1.25)	(-3.71)	(8.64)	(-1.79)	(1.35)
Investment	0.0265	0.0244*	0.0265	0.0244	0.0635**	0.00375	0.0635	0.00375
	(0.77)	(1.69)	(0.50)	(1.16)	(2.09)	(0.24)	(1.13)	(0.17)
Acquisitions	0.00580***	-0.0000926	0.00580	-0.0000926*	0.00588***	-0.000101	0.00588	-0.000101*
	(4.15)	(-0.75)	(0.88)	(-1.71)	(4.49)	(-0.80)	(0.91)	(-1.86)
MB	0.00929***	-0.00288***	0.00929***	-0.00288**	0.00684***	-0.00307***	0.00684**	-0.00307**
	(18.89)	(-16.27)	(4.02)	(-1.97)	(17.07)	(-16.24)	(2.11)	(-1.98)
Market Cap	-0.0221***	0.00790***	-0.0221***	0.00790***	-0.0166***	0.00870***	-0.0166***	0.00870***
	(-5.70)	(10.17)	(-3.39)	(4.35)	(-5.04)	(10.41)	(-2.62)	(4.54)
Dividend Dummy	0.0115	0.000302	0.0115	0.000302	0.00860	0.000157	0.00860	0.000157
	(1.04)	(0.13)	(0.81)	(0.15)	(0.91)	(0.06)	(0.70)	(0.08)
R&D	0.0301	0.00456	0.0301	0.00456	0.0228	0.00339	0.0228	0.00339
	(1.58)	(1.23)	(1.39)	(1.18)	(1.44)	(0.84)	(1.28)	(0.79)
Constant	0.218***	-0.0400***	0.218***	-0.0400***	0.178***	-0.0427***	0.178***	-0.0427***
	(8.63)	(-9.24)	(6.85)	(-6.39)	(8.23)	(-9.26)	(6.08)	(-6.59)
Firm F.E	YES	YES	YES	YES	YES	YES	YES	YES
Clustered std Errors	NO	NO	YES	YES	NO	NO	YES	YES
Year F.E	NO	NO	YES	YES	NO	NO	YES	YES
N	14,272	33,032	14,272	33,032	16,802	30,502	16,802	30,502
R^2	0.0643	0.0290	0.0643	0.0290	0.0490	0.0293	0.0490	0.0293

NOTE: t-statistics in parentheses* p;0.10, ** p;0.05, *** p;0.01

Table 6: Creditors Rights and Equity Issuance*:This table presents results from a regression analysis where the dependent variable is equity issuance. The explanatory variables in columns[1&2]: Size is estimated as natural logarithms of total sales. Tangibility, profitability and MB are described in Table[1]. Columns[3&4] include additional variables. All estimations include firm fixed effects. Standard errors are clustered at firm-level. Within* R^2 *is reported.*

	(1)	(2)	(3)	(4)
	Equity Issuance	Equity Issuance	Equity Issuance	Equity Issuance
Law	-0.0195***	-0.0195***	-0.0264***	-0.0264***
	(-3.75)	(-2.94)	(-5.10)	(-4.20)
Size	-0.0545***	-0.0545***	-0.0775***	-0.0775***
	(-59.68)	(-19.86)	(-76.56)	(-24.05)
Profits	-0.149***	-0.149***	-0.134***	-0.134***
	(-95.24)	(-4.96)	(-70.85)	(-3.64)
Tangibility	-0.197***	-0.197***	-0.182***	-0.182***
	(-23.15)	(-11.40)	(-19.95)	(-6.16)
MB	0.000761***	0.000761	0.00399***	0.00399**
	(16.06)	(1.16)	(28.00)	(2.25)
Cash Flow			-0.00556***	-0.00556*
			(-8.54)	(-1.86)
NWC			-0.00576***	-0.00576
			(-3.08)	(-0.45)
Investment			0.230***	0.230*
			(17.15)	(1.80)
Market Cap			0.0521***	0.0521***
			(58.36)	(16.73)
Acquisitions			-0.0000402	-0.0000402
			(-0.16)	(-0.09)
Dividend Dummy			0.0707***	0.0707***
			(27.01)	(20.21)
R&D			0.0189***	0.0189**
			(4.08)	(2.57)
Constant	0.405***	0.405***	0.205***	0.205***
	(85.22)	(30.01)	(35.41)	(14.70)
Firm F.E	YES	YES	YES	YES
Year F.E	NO	YES	NO	YES
Clustered Std. Errors	NO	YES	NO	YES
N	101,879	101,879	94,952	94,952
R^2	0.151	0.151	0.218	0.218

NOTE: t-statistics in parentheses* p:0.10, ** p:0.05, *** p:0.01

TABLE 7: Active vs Passive Equity Issuers *:*

This table presents results from a regression analysis where the dependent variable is equity issuance. Firms are sorted into either active or passive issuers. A firm is classified as active if it issue equity greater than ***5% of total assets****. All estimations include firm fixed effects. Standard errors are clustered at firm-level. Within* R^2 *is reported.*

	(1)	(2)	(3)	(4)
	EquityIssuance	EquityIssuance	EquityIssuance	EquityIssuance
Equity Issuers	**Active**	**Passive**	**Active**	**Passive**
Law	-0.103***	-0.000290	-0.103***	-0.000290
	(-4.18)	(-1.30)	(-4.43)	(-0.85)
Size	-0.0947***	-0.000314***	-0.0947***	-0.000314***
	(-31.49)	(-6.20)	(-16.55)	(-2.95)
Profits	-0.174***	-0.000258***	-0.174***	-0.000258
	(-24.48)	(-3.26)	(-3.25)	(-1.32)
Tangibility	-0.467***	0.000261	-0.467***	0.000261
	(-13.57)	(0.74)	(-5.98)	(0.61)
Cash Flow	-0.0575***	-0.0000241*	-0.0575**	-0.0000241**
	(-11.23)	(-1.66)	(-2.09)	(-2.20)
NWC	0.0172***	-0.000347***	0.0172	-0.000347
	(3.78)	(-4.51)	(0.65)	(-1.38)
Investment	0.536***	0.000251	0.536***	0.000251
	(13.91)	(0.42)	(3.03)	(0.35)
Acquisitions	0.000239	-0.0000255	0.000239	-0.0000255
	(0.45)	(-1.48)	(0.60)	(-1.38)
MB	0.00106***	0.0000291***	0.00106	0.0000291
	(3.65)	(3.10)	(0.67)	(0.48)
Market Cap	0.0520***	0.000124***	0.0520***	0.000124***
	(14.50)	(3.29)	(8.25)	(2.91)
Dividend Dummy	0.0788***	-0.0000476	0.0788***	-0.0000476
	(8.07)	(-0.40)	(7.96)	(-0.74)
R&D	0.0127	-0.000636***	0.0127	-0.000636**
	(0.67)	(-3.51)	(0.58)	(-2.18)
Constant	0.472***	0.00149***	0.472***	0.00149***
	(22.77)	(6.64)	(14.47)	(3.26)
Firm F.E	YES	YES	YES	YES
Clustered Std Errors	NO	NO	YES	YES
Year F.E	NO	NO	YES	YES
N	21,826	28,730	21,826	28,730
R^2	0.328	0.00645	0.328	0.00645

NOTE:t-statistics in parentheses * p:0.10, ** p:0.05, *** p:0.01

TABLE 8: Placebo Tests:

This table presents results from a regression analysis where the dependent variable is market leverage in columns[1-2]. The dependent variable is equity issuance in columns[3-4]. The dependent variable is debt issuance in models[5-6]. The dependent variable is short-term debt in column[7] and long-term debt columns[8]. Size is estimated as natural logarithms of total sales. Tangibility, profitability and MB are described in Table[1]. All estimations include firm fixed effects. Standard errors are clustered at firm-level. Within R^2 is reported.

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Market Lev	Market Lev	EquityIssuance	EquityIssuance	Debt Issuance	Debt Issuance	ST Debt	LT Debt
Placebo Law	0.0129**	0.0129	-0.00875	-0.00875	-0.00128	-0.00128	-0.00228	0.00963
	(2.34)	(1.23)	(-1.03)	(-1.17)	(-0.11)	(-0.14)	(-0.57)	(1.18)
Size	0.0261***	0.0261***	-0.0550***	-0.0550***	0.00961***	0.00961***	0.00142**	0.0152***
	(44.46)	(22.60)	(-60.65)	(-20.27)	(7.57)	(5.27)	(2.30)	(15.50)
Tangibility	0.233***	0.233***	-0.197***	-0.197***	0.0562***	0.0562***	0.0639***	0.170***
	(42.20)	(19.54)	(-23.07)	(-11.34)	(4.75)	(2.99)	(10.04)	(16.72)
Profits	-0.00969***	-0.00969***	-0.149***	-0.149***	-0.0167***	-0.0167*	-0.0157***	-0.00452***
	(-9.50)	(-2.72)	(-95.17)	(-4.96)	(-8.94)	(-1.92)	(-5.37)	(-2.79)
MB	-0.000284***	-0.000284	0.000761***	0.000761	0.000129***	0.000129	-0.0000353	-0.0000715
	(-9.18)	(-1.17)	(16.06)	(1.16)	(2.98)	(0.65)	(-1.00)	(-1.18)
Constant	0.0392***	0.0392***	0.405***	0.405***	0.00943	0.00943	0.0359***	0.0477***
	(12.69)	(6.37)	(85.30)	(30.11)	(1.49)	(1.00)	(11.16)	(9.19)
Firm F.E	YES	YES	YES	YES	YES	YES	YES	YES
Clustered Std Errors	NO	YES	NO	YES	NO	YES	YES	YES
Year F.E	NO	YES	NO	YES	NO	YES	YES	YES
N	103,650	103,650	101,879	101,879	50,591	50,591	103,650	103,650
R^2	0.0410	0.0410	0.151	0.151	0.00383	0.00383	0.0134	0.0284

NOTE: t-statistics in parentheses * p:0.10, ** p:0.05, *** p:0.01

TABLE 9[A]:Accounting for the three states that passed the laws before 2003:

This table presents results from a regression analysis where the dependent variable is market leverage in columns[1-2]. The dependent variable is equity issuance in columns[3-4]. The dependent variable is debt issuance in models[5-6]. $Law_3states$ is a dummy variable equals to "1" if a firm is incorporated in, Texas and Louisiana after 1997 and Alabama after 2002. Size is estimated as natural logarithms of total sales. Tangibility, profitability and MB are described in Table[1]. All estimations include firm fixed effects. Standard errors are clustered at firm-level. Within R^2 is reported

	(1)	(2)	(3)	(4)	(5)	(6)
	Market Leverage	Market Leverage	EquityIssuance	EquityIssuance	DebtIssuance	DebtIssuance
$Law_3states$	0.0238***	0.0238***	-0.0184***	-0.0184**	0.0239***	0.0239*
	(6.16)	(2.89)	(-3.07)	(-2.31)	(2.71)	(1.76)
Size	0.0257***	0.0257***	-0.0547***	-0.0547***	0.00928***	0.00928***
	(43.54)	(22.08)	(-59.95)	(-19.96)	(7.29)	(5.13)
Tangibility	0.232***	0.232***	-0.197***	-0.197***	0.0567***	0.0567***
	(42.21)	(19.51)	(-23.08)	(-11.37)	(4.80)	(3.03)
Profits	-0.00955***	-0.00955***	-0.149***	-0.149***	-0.0166***	-0.0166*
	(-9.36)	(-2.69)	(-95.22)	(-4.96)	(-8.86)	(-1.91)
MB	-0.000284***	-0.000284	0.000761***	0.000761	0.000129***	0.000129
	(-9.19)	(-1.17)	(16.06)	(1.16)	(2.98)	(0.65)
Constant	0.0395***	0.0395***	0.405***	0.405***	0.00920	0.00920
	(12.79)	(6.41)	(85.25)	(30.03)	(1.46)	(0.97)
Firm F.E & Year F.E	YES	YES	YES	YES	YES	YES
Clustered Std. Errors	NO	YES	NO	YES	NO	YES
N	103,650	103,650	101,879	101,879	50,591	50,591
R^2	0.0998	0.0998	0.247	0.247	0.0109	0.0109

NOTE: t- statistics in parentheses* p:0.10, ** p:0.05, *** p:0.01

TABLE 9[B]:Accounting for the three states that passed the laws before 2003:

This table presents results from a regression analysis where firms are sorted into ***active vs passive issuers****. The dependent variable is equity issuance in columns[1-2]. The dependent variable is debt issuance in models[3-4]. A firm is classified as "active issuer" if it issue more than 5% of assets in fiscal year- otherwise it is passive. Size is estimated as natural logarithms of total sales. Tangibility, profitability and MB are described in Table[1]. All estimations include firm fixed effects. Standard errors are clustered at firm-level. Within* R^2 *is reported*

	(1)	(2)	(3)	(4)
	EquityIssuance	EquityIssuance	DebtIssuance	DebtIssuance
ISSUERS	**Active**	**Passive**	**Active**	**Passive**
$Law_3 states$	-0.0984***	0.0000944	0.0715*	-0.00659
	(-3.91)	(1.05)	(1.88)	(-1.26)
Size	-0.0950***	-0.000323***	0.0171**	-0.00144
	(-16.65)	(-3.08)	(2.42)	(-1.01)
Tangibility	-0.464***	0.000271	-0.178***	0.0217
	(-5.95)	(0.63)	(-3.49)	(1.29)
Profits	-0.174***	-0.000256	-0.0323**	0.00425
	(-3.25)	(-1.32)	(-2.05)	(0.31)
MB	0.00106	0.0000291	0.00930***	-0.00288**
	(0.67)	(0.48)	(4.06)	(-1.97)
Cash Flow	-0.0575**	-0.0000240**	0.00212	0.00505
	(-2.09)	(-2.19)	(1.40)	(0.40)
NWC	0.0172	-0.000342	-0.0697**	0.0190
	(0.65)	(-1.36)	(-2.28)	(1.26)
Investment	0.537***	0.000254	0.0677	0.00944
	(3.03)	(0.36)	(0.93)	(0.48)
Acquisitions	0.000228	-0.0000260	0.00582	-0.0000948*
	(0.57)	(-1.41)	(0.89)	(-1.77)
Market Cap	0.0520***	0.000123***	-0.0238***	0.00823***
	(8.24)	(2.90)	(-3.60)	(4.24)
Dividend Dummy	0.0791***	-0.0000428	0.0112	0.000253
	(7.98)	(-0.67)	(0.79)	(0.13)
R&D	0.0103	-0.000636**	0.0291	0.00448
	(0.47)	(-2.18)	(1.35)	(1.16)
Constant	0.473***	0.00149***	0.274***	-0.0443***
	(14.50)	(3.27)	(7.44)	(-5.58)
Firm F.E & Year	YES	YES	YES	YES
Clustered Std Errors	YES	YES	YES	YES
N	21,826	28,730	14,269	33,001
R^2	0.328	0.00638	0.0668	0.0293

NOTE: t-statistics in parentheses* p:0.10, ** p:0.05, *** p:0.01

TABLE 10: Accounting for growth rates in Covariates- Balance Sheet Expansion:
This table presents results from a regression analysis where the dependent variable is market leverage in columns[1-2]. The dependent variable is equity issuance in columns[3-4]. The dependent variable is debt issuance in models[5-6]. Size is estimated as natural logarithms of total sales. Tangibility, profitability and MB are described in Table[1]. All estimations include firm fixed effects. Standard errors are clustered at firm-level. Within R^2 is reported

	(1)	(2)	(3)	(4)	(5)	(6)
	Mkt lev	Mkt Lev	$\Delta Mktlev_{t,t-1}$	$\Delta Mktlev_{t,t-1}$	Equity Issuance	EquityIssuance
Law	0.0219***	0.0219***	0.0163***	0.0163***	-0.0130***	-0.0130***
	(6.13)	(2.83)	(5.06)	(5.63)	(-2.80)	(-2.60)
$\Delta size_{t,t-1}$xLaw	-0.00243	-0.00243	0.000730	0.000730	-0.0237***	-0.0237**
	(-0.73)	(-0.41)	(0.24)	(0.17)	(-5.49)	(-2.20)
$\Delta size_{t,t-1}$	-0.0178***	-0.0178***	0.0135***	0.0135***	0.0159***	0.0159***
	(-16.60)	(-11.99)	(13.82)	(9.03)	(11.49)	(4.69)
$\Delta tang_{t,t-1}$xLaw	0.0457**	0.0457	0.0204	0.0204	0.170***	0.170***
	(2.02)	(1.50)	(1.00)	(0.52)	(5.83)	(4.46)
$\Delta profits_{t,t-1}$xLaw	-0.000897	-0.000897	0.00702***	0.00702	0.0302***	0.0302*
	(-0.41)	(-0.47)	(2.64)	(0.93)	(10.74)	(1.70)
$\Delta MB_{t,t-1}$xLaw	-0.000141	-0.000141	0.00109***	0.00109	0.00126***	0.00126
	(-0.61)	(-0.41)	(4.54)	(1.10)	(4.22)	(1.21)
$\Delta profits_{t,t-1}$	-0.00208***	-0.00208***	-0.0138***	-0.0138***	-0.0227***	-0.0227
	(-3.17)	(-3.46)	(-12.42)	(-3.75)	(-26.98)	(-1.42)
$\Delta tang_{t,t-1}$	0.0638***	0.0638***	0.209***	0.209***	-0.260***	-0.260***
	(8.18)	(6.33)	(29.66)	(17.08)	(-25.78)	(-12.39)
$\Delta MB_{t,t-1}$	-0.000132***	-0.000132**	-0.00229***	-0.00229***	-0.00129***	-0.00129
	(-2.77)	(-2.09)	(-23.17)	(-4.23)	(-21.20)	(-1.50)
Constant	0.222***	0.222***	0.00649***	0.00649***	0.0701***	0.0701***
	(359.64)	(300.98)	(11.71)	(19.10)	(87.71)	(98.32)
Firm F.E & Year F.E	YES	YES	YES	YES	YES	YES
Clustered Std. Errors	NO	YES	NO	YES	NO	YES
N	90,149	90,149	90,125	90,125	88,582	88,582
R^2	0.00593	0.00593	0.0254	0.0254	0.0175	0.0175

NOTE:t-statistics in parentheses * p:0.10, ** p:0.05, *** p:0.01

TABLE 11: Equity Issuance: Constrained vs. Unconstrained Firms:

This table presents results from a regression analysis where the dependent variable is equity issuance. Firm are sorted into low vs high based on level of financial constraints- Whited-Wu Index. Size is estimated as natural logarithms of total sales. Tangibility, profitability and MB are described in Table[1]. All estimations include firm fixed effects. Standard errors are clustered at firm-level. Within R^2 is reported

	(1)	(2)	(3)	(4)
	EquityIssuance	EquityIssuance	EquityIssuance	EquityIssuance
	Unconstrained	**Constrained**	**Unconstrained**	**Constrained**
Whited-Wu Index	**LOW**	**HIGH**	**LOW**	**HIGH**
Law	-0.00940***	-0.0138	-0.00940***	-0.0138
	(-3.12)	(-1.32)	(-2.85)	(-1.26)
$\Delta Size_{t,t-1}$xLaw	-0.0378***	-0.0338***	-0.0378***	-0.0338*
	(-7.91)	(-4.22)	(-4.04)	(-1.86)
$\Delta Size_{t,t-1}$	0.0593***	0.0126***	0.0593***	0.0126**
	(36.15)	(5.06)	(11.55)	(2.48)
$\Delta Profits_{t,t-1}$xLaw	0.00423	0.0308***	0.00423	0.0308*
	(0.40)	(7.70)	(0.25)	(1.68)
$\Delta Profits_{t,t-1}$	-0.0207***	-0.0224***	-0.0207	-0.0224
	(-4.77)	(-18.34)	(-1.45)	(-1.37)
$\Delta Tang_{t,t-1}$xLaw	0.169***	0.199***	0.169***	0.199***
	(7.27)	(3.77)	(5.10)	(3.27)
$\Delta Tang_{t,t-1}$	-0.259***	-0.280***	-0.259***	-0.280***
	(-30.20)	(-16.01)	(-16.40)	(-9.33)
$\Delta MB_{t,t-1}$xLaw	0.000869	0.00130***	0.000869	0.00130
	(0.67)	(3.08)	(0.51)	(1.21)
$\Delta MB_{t,t-1}$	-0.00101***	-0.00128***	-0.00101*	-0.00128
	(-5.23)	(-14.62)	(-1.88)	(-1.44)
Constant	0.0263***	0.103***	0.0263***	0.103***
	(39.99)	(64.71)	(19.32)	(81.39)
Firm F.E	YES	YES	YES	YES
Clustered Std. Errors	NO	NO	YES	YES
Year F.E	NO	NO	YES	YES
N	45,262	43,320	45,262	43,320
R^s	0.0594	0.0162	0.0594	0.0162

NOTE: t-statistics in parentheses * p:0.10, ** p:0.05, *** p:0.01

TABLE 12: Equity Repurchases:

This table presents results from a regression analysis where the dependent variable is equity repurchase. Equity repurchase is estimated as purchase of common stock. Size is estimated as natural logarithms of total sales. Tangibility, profitability and MB are described in Table[1]. Columns[3-6] use growth rates in covariates as independent variables. All estimation includes firm fixed effects. Standard errors are clustered at firm-level. Within R^2 is reported

	(1)	(2)	(3)	(4)	(5)	(6)
	EquityRep	EquityRep	EquityRep	EquityRep	EquityRep	EquityRep
Law	0.00515***	0.00515***	0.00883***	0.00883***	0.00870***	0.00870***
	(4.37)	(3.28)	(7.23)	(5.96)	(7.11)	(5.82)
Size	0.00273***	0.00273***				
	(12.73)	(9.17)				
Tangibility	-0.00260	-0.00260				
	(-1.33)	(-1.11)				
Profits	0.000279	0.000279				
	(0.75)	(0.70)				
MB	0.00000969	0.00000969				
	(0.92)	(1.02)				
$\Delta size_{t,t-1}$			-0.00302***	-0.00302***	-0.00321***	-0.00321***
			(-8.35)	(-7.48)	(-8.38)	(-7.49)
$\Delta Profit_{t,t-1}$			0.000150	0.000150	0.000172	0.000172*
			(0.68)	(1.62)	(0.77)	(1.81)
$\Delta Tang_{t,t-1}$			0.0302***	0.0302***	0.0293***	0.0293***
			(11.88)	(10.08)	(10.84)	(9.67)
$\Delta MB_{t,t-1}$			0.00000592	0.00000592	0.00000766	0.00000766
			(0.37)	(0.90)	(0.47)	(1.16)
$\Delta size_{t,t-1}$xLaw					0.00176	0.00176
					(1.50)	(1.38)
$\Delta Tang_{t,t-1}$xLaw					0.00712	0.00712
					(0.90)	(0.67)
$\Delta profit_{t,t-1}$xLaw					-0.000332	-0.000332
					(-0.46)	(-0.66)
$\Delta MB_{t,t-1}$xLaw					-0.0000416	-0.0000416
					(-0.54)	(-0.77)
Constant	0.00237**	0.00237	0.0148***	0.0148***	0.0148***	0.0148***
	(2.10)	(1.51)	(69.99)	(102.35)	(69.98)	(101.21)
Firm F.E & Year F.E	YES	YES	YES	YES	YES	YES
Clustered Std. Errors	NO	YES	NO	YES	NO	YES
N	95,246	95,246	82,998	82,998	82,998	82,998
R^2	0.00255	0.00255	0.00355	0.00355	0.00360	0.00360

NOTE: t-statistics in parentheses * p:0.10, ** p:0.05, *** p:0.01

TABLE 13: Financial Constraints and Leverage :

This table presents results from a regression analysis where the dependent variable is market leverage in columns[1-2]. The dependent variable is long-term debt in columns[3-4]. The dependent variable is short-term debt in models[5-6]. Size is estimated as natural logarithms of total sales. Tangibility, profitability and MB are described in Table[1]. All estimations include firm fixed effects. Standard errors are clustered at firm-level. Within R^2 is reported

	(1)	(2)	(3)	(4)	(5)	(6)
	Market Leverage	Market Leverage	LT Debt	LT Debt	ST Debt	ST Debt
TABLE 13:	**Unconstrained**	**Constrained**	**Unconstrained**	**Constrained**	**Unconstrained**	**Constrained**
Whited-Wu Index	**LOW**	**HIGH**	**LOW**	**HIGH**	**LOW**	**HIGH**
Law	-0.00687	0.0377***	-0.00847	0.0117	-0.00539**	-0.00286
	(-1.08)	(4.19)	(-1.24)	(1.59)	(-2.12)	(-0.53)
Size	0.129***	0.0509***	0.0441***	0.0128***	0.00811***	0.00954***
	(42.63)	(29.69)	(19.20)	(9.88)	(6.18)	(9.73)
Tangibility	0.0796***	0.173***	0.136***	0.185***	0.00796	0.0488***
	(4.44)	(12.10)	(7.77)	(15.39)	(1.09)	(5.01)
MB	0.0116***	0.000929***	0.00177***	-0.0000807	0.000706**	0.000104
	(13.15)	(3.81)	(3.49)	(-0.81)	(2.46)	(0.98)
Profits	-0.181***	0.0172***	-0.172***	0.00187	0.0653*	0.00848
	(-6.05)	(4.72)	(-12.00)	(0.69)	(1.84)	(1.39)
Cash Flow	-0.0421**	-0.00708***	0.0145	-0.00493**	-0.0666**	-0.00697
	(-1.96)	(-2.94)	(1.61)	(-2.35)	(-2.10)	(-1.35)
NWC	-0.0131	-0.0112*	0.0664***	0.0101**	-0.112***	-0.0431*
	(-0.66)	(-1.92)	(3.52)	(2.08)	(-3.00)	(-1.88)
Capx	-0.132***	-0.122***	-0.0590***	-0.0269**	-0.00248	-0.0263
	(-6.99)	(-3.32)	(-2.89)	(-2.05)	(-0.25)	(-1.26)
Acquisitions	0.0411***	0.000641***	0.0372***	0.000130	0.000881	-0.0000523
	(6.97)	(3.03)	(4.86)	(0.69)	(0.77)	(-0.70)
Market Cap	-0.126***	-0.0894***	-0.0275***	-0.00638***	-0.0150***	-0.0213***
	(-42.39)	(-51.91)	(-13.87)	(-5.44)	(-12.25)	(-16.00)
Dividend Dummy	-0.00221	-0.00281	-0.00666**	-0.00293	0.000826	0.000961
	(-0.78)	(-0.83)	(-2.24)	(-0.98)	(0.71)	(0.43)
R&D	0.0000463	-0.00608	-0.00440	-0.000897	-0.00419	-0.00812*
	(0.01)	(-0.95)	(-0.65)	(-0.19)	(-1.56)	(-1.90)
Constant	0.178***	0.335***	0.0619***	0.0754***	0.0859***	0.113***
	(14.33)	(43.13)	(5.21)	(11.80)	(12.51)	(19.26)
Firm F.E & Year F.E	YES	YES	YES	YES	YES	YES
Clustered Std Errors	YES	YES	YES	YES	YES	YES
N	46,084	50,358	46,084	50,358	46,084	50,358
R^2	0.462	0.331	0.0865	0.0348	0.149	0.108

NOTE: t-statistics in parentheses * p:0.10, ** p:0.05, *** p:0.01

TABLE 14: Accounting for the Effects of the 2008 Financial Crisis:

This table presents results from a regression analysis where the dependent variable is market leverage in columns[1-2]. The dependent variable is equity issuance in columns[3-4]. The dependent variable is debt issuance in models[5-6]. Size is estimated as natural logarithms of total sales. Tangibility, profitability and MB are described in Table[1]."After" is a dummy equals 1 after the 2008 financial crisis and zero otherwise. All estimation includes firm fixed effects. Standard errors are clustered at firm-level. Within R^2 is reported. ***NOTE:*** *t-statistics in parentheses * p:0.10, ** p:0.05, *** p:0.01*

	(1)	(2)	(3)	(4)	(5)	(6)
	Market Leverage	Market Leverage	Equity Issuance	Equity Issuance	Debt Issuance	Debt Issuance
Law	0.0285***	0.0285***	-0.0242***	-0.0242***	0.0182**	0.0182
	(10.00)	(4.48)	(-4.66)	(-3.93)	(2.32)	(1.60)
After	0.00698***	0.00698***	-0.0149***	-0.0149***	0.00591*	0.00591
	(5.14)	(2.69)	(-6.03)	(-4.04)	(1.76)	(0.92)
Size	0.0690***	0.0690***	-0.0759***	-0.0759***	0.0141***	0.0141***
	(119.90)	(41.84)	(-72.61)	(-22.72)	(9.46)	(3.64)
Tangibility	0.153***	0.153***	-0.187***	-0.187***	0.0156	0.0156
	(30.26)	(12.00)	(-20.35)	(-6.32)	(1.18)	(0.68)
Profits	0.00341***	0.00341	-0.135***	-0.135***	-0.0103***	-0.0103
	(3.25)	(1.19)	(-71.06)	(-3.64)	(-4.61)	(-1.60)
MB	0.00125***	0.00125***	0.00398***	0.00398**	0.00284***	0.00284
	(15.88)	(3.62)	(27.89)	(2.24)	(14.25)	(1.07)
Cash Flow	-0.000661*	-0.000661	-0.00555***	-0.00555*	0.00418***	0.00418**
	(-1.83)	(-1.00)	(-8.52)	(-1.85)	(5.92)	(2.13)
NWC	-0.0110***	-0.0110	-0.00599***	-0.00599	-0.00292	-0.00292
	(-10.57)	(-1.52)	(-3.20)	(-0.46)	(-0.76)	(-0.20)
CAPX	-0.157***	-0.157***	0.226***	0.226*	0.164***	0.164***
	(-21.14)	(-4.88)	(16.84)	(1.75)	(9.23)	(2.97)
Acquisitions	0.00111***	0.00111***	-0.0000250	-0.0000250	0.000417*	0.000417
	(7.85)	(2.78)	(-0.10)	(-0.06)	(1.66)	(0.96)
Market Cap	-0.0962***	-0.0962***	0.0518***	0.0518***	-0.00696***	-0.00696
	(-195.59)	(-66.66)	(57.97)	(16.79)	(-5.40)	(-1.56)
Dividend Dummy	-0.00113	-0.00113	0.0708***	0.0708***	0.00399	0.00399
	(-0.78)	(-0.46)	(27.05)	(20.25)	(1.05)	(0.83)
R&D	-0.000845	-0.000845	0.0193***	0.0193***	0.0194***	0.0194**
	(-0.33)	(-0.17)	(4.17)	(2.65)	(3.09)	(1.96)
Constant	0.314***	0.314***	0.203***	0.203***	-0.000375	-0.000375
	(98.18)	(42.13)	(34.90)	(14.22)	(-0.05)	(-0.03)
Firm F.E & Year F.E	YES	YES	YES	YES	YES	YES
Clustered Std Errors	NO	YES	NO	YES	NO	YES
N	96,442	96,442	94,952	94,952	47,270	47,270
R^2	0.361	0.361	0.218	0.218	0.0124	0.0124

TABLE 15[A]: Accounting for the Effects of the Internal Capital:

This table presents results from a regression analysis where the dependent variable is market leverage in columns[1-2]. The dependent variable is equity issuance in columns[3-4]. The dependent variable is debt issuance in models[5-6]. Size is estimated as natural logarithms of total sales. Tangibility, profitability and MB are described in Table[1]. All estimation includes firm fixed effects. Standard errors are clustered at firm-level. Within R^2 is reported

	(1)	(2)	(3)	(4)	(5)	(6)
	Market Lev	Market Lev	EquityIssuance	EquityIssuance	Debt Issuance	Debt Issuance
Law	0.0302***	0.0302***	-0.0289***	-0.0289***	0.0195**	0.0195*
	(10.67)	(4.75)	(-5.68)	(-4.54)	(2.49)	(1.72)
Cash	-0.0884***	-0.0884***	0.357***	0.357***	-0.103***	-0.103***
	(-23.39)	(-13.52)	(52.72)	(22.25)	(-11.38)	(-8.81)
Size	0.0655***	0.0655***	-0.0601***	-0.0601***	0.00953***	0.00953**
	(111.80)	(39.80)	(-57.25)	(-17.58)	(6.30)	(2.36)
Tangibility	0.111***	0.111***	-0.0234**	-0.0234	-0.0382***	-0.0382*
	(21.07)	(8.33)	(-2.47)	(-0.80)	(-2.74)	(-1.67)
Profits	0.00442***	0.00442	-0.139***	-0.139***	-0.00896***	-0.00896
	(4.22)	(1.53)	(-74.62)	(-3.69)	(-4.00)	(-1.40)
MB	0.00126***	0.00126***	0.00394***	0.00394**	0.00282***	0.00282
	(15.98)	(3.63)	(28.13)	(2.22)	(14.16)	(1.06)
Cash Flow	-0.000679*	-0.000679	-0.00546***	-0.00546*	0.00407***	0.00407**
	(-1.89)	(-1.02)	(-8.53)	(-1.80)	(5.77)	(2.08)
NWC	-0.0122***	-0.0122	-0.00127	-0.00127	-0.00599	-0.00599
	(-11.79)	(-1.59)	(-0.69)	(-0.10)	(-1.56)	(-0.41)
Capx	-0.161***	-0.161***	0.241***	0.241*	0.159***	0.159***
	(-21.82)	(-4.94)	(18.22)	(1.89)	(8.94)	(2.95)
Acquisitions	0.00106***	0.00106***	0.000200	0.000200	0.000370	0.000370
	(7.48)	(2.84)	(0.79)	(0.62)	(1.48)	(0.88)
Market Cap	-0.0939***	-0.0939***	0.0425***	0.0425***	-0.00395***	-0.00395
	(-187.84)	(-64.66)	(47.31)	(14.09)	(-3.01)	(-0.87)
Dividend Dummy	-0.000595	-0.000595	0.0688***	0.0688***	0.00450	0.00450
	(-0.41)	(-0.24)	(26.70)	(19.65)	(1.18)	(0.93)
R&D	0.000504	0.000504	0.0143***	0.0143*	0.0198***	0.0198**
	(0.20)	(0.10)	(3.14)	(1.89)	(3.17)	(2.02)
Constant	0.349***	0.349***	0.0608***	0.0608***	0.0417***	0.0417***
	(98.80)	(43.05)	(9.61)	(3.55)	(4.68)	(3.17)
Firm F.E & Year F.E	YES	YES	YES	YES	YES	YES
Clustered Std Errors	NO	YES	NO	YES	NO	YES
N	96,442	96,442	94,952	94,952	47,270	47,270
R^2	0.365	0.365	0.243	0.243	0.0156	0.0156

NOTE: t-statistics in parentheses: * p:0.10, ** p:0.05, *** p:0.01

TABLE 15[B]: Accounting for the Effects of the Internal Capital: *This table presents results from a regression analysis where the dependent variable is market leverage in columns[1-4]. The dependent variable is debt issuance in columns[5-8]. Size is estimated as natural logarithms of total sales. Tangibility, profitability and MB are described in Table[1]. All estimations include firm fixed effects. Standard errors are clustered at firm-level. Within R^2 is reported*

Table 15B	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Market Lev	Market Lev	Market Lev	Market Lev	Debt Issuance	Debt Issuance	Debt Issuance	Debt Issuance
Law	0.0302***	0.0302***	0.0398***	0.0398***	0.0195**	0.0195*	0.0257***	0.0257*
	(10.67)	(10.67)	(5.77)	(12.47)	(2.49)	(1.72)	(2.89)	(1.76)
LawxCash			-0.0737***	-0.0737***			-0.0393	-0.0393
			(-2.95)	(-6.52)			(-1.48)	(-1.11)
Cash	-0.0884***	-0.0884***	-0.0836***	-0.0836***	-0.103***	-0.103***	-0.101***	-0.101***
	(-23.39)	(-23.39)	(-12.35)	(-21.74)	(-11.38)	(-8.81)	(-10.88)	(-8.32)
Size	0.0655***	0.0655***	0.0654***	0.0654***	0.00953***	0.00953**	0.00942***	0.00942**
	(111.80)	(111.80)	(39.80)	(111.66)	(6.30)	(2.36)	(6.22)	(2.35)
Tangibility	0.111***	0.111***	0.110***	0.110***	-0.0382***	-0.0382*	-0.0387***	-0.0387*
	(21.07)	(21.07)	(8.26)	(20.88)	(-2.74)	(-1.67)	(-2.78)	(-1.69)
Profits	0.00442***	0.00442***	0.00445	0.00445***	-0.00896***	-0.00896	-0.00891***	-0.00891
	(4.22)	(4.22)	(1.55)	(4.25)	(-4.00)	(-1.40)	(-3.98)	(-1.40)
MB	0.00126***	0.00126***	0.00126***	0.00126***	0.00282***	0.00282	0.00282***	0.00282
	(15.98)	(15.98)	(3.63)	(15.97)	(14.16)	(1.06)	(14.16)	(1.06)
Cash Flow	-0.000679*	-0.000679*	-0.000664	-0.000664*	0.00407***	0.00407**	0.00408***	0.00408**
	(-1.89)	(-1.89)	(-1.00)	(-1.85)	(5.77)	(2.08)	(5.78)	(2.08)
NWC	-0.0122***	-0.0122***	-0.0123	-0.0123***	-0.00599	-0.00599	-0.00603	-0.00603
	(-11.79)	(-11.79)	(-1.60)	(-11.87)	(-1.56)	(-0.41)	(-1.57)	(-0.41)
Capx	-0.161***	-0.161***	-0.161***	-0.161***	0.159***	0.159***	0.159***	0.159***
	(-21.82)	(-21.82)	(-4.92)	(-21.85)	(8.94)	(2.95)	(8.93)	(2.96)
Acquisitions	0.00106***	0.00106***	0.00106***	0.00106***	0.000370	0.000370	0.000371	0.000371
	(7.48)	(7.48)	(2.83)	(7.50)	(1.48)	(0.88)	(1.48)	(0.88)
Market Cap	-0.0939***	-0.0939***	-0.0940***	-0.0940***	-0.00395***	-0.00395	-0.00395***	-0.00395
	(-187.84)	(-187.84)	(-64.52)	(-187.95)	(-3.01)	(-0.87)	(-3.01)	(-0.87)
Dividend Dummy	-0.000595	-0.000595	-0.000517	-0.000517	0.00450	0.00450	0.00458	0.00458
	(-0.41)	(-0.41)	(-0.21)	(-0.36)	(1.18)	(0.93)	(1.20)	(0.95)
R&D	0.000504	0.000504	0.000494	0.000494	0.0198***	0.0198**	0.0198***	0.0198**
	(0.20)	(0.20)	(0.10)	(0.19)	(3.17)	(2.02)	(3.16)	(2.01)
Constant	0.349***	0.349***	0.349***	0.349***	0.0417***	0.0417***	0.0418***	0.0418***
	(98.80)	(98.80)	(43.09)	(98.81)	(4.68)	(3.17)	(4.70)	(3.18)
Firm F.E & Year F.E	YES	YES	YES	YES	YES	YES	YES	YES
Clustered Std Erros	NO	YES	NO	YES	NO	YES	NO	YES
N	96,442	96,442	96,442	96,442	47,270	47,270	47,270	47,270
R^2	0.365	0.365	0.365	0.365	0.0156	0.0156	0.0157	0.0157

NOTE: t-statistics in parentheses * p:0.10, ** p:0.05, *** p:0.01