

Do Creditor Rights Affect Financial Contracts? Evidence from the Anti-Recharacterization Statute *

[JOB MARKET PAPER]

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Abstract

This paper examines the effect of creditor rights on bank loan contract design. Focusing on the conflict of interest between creditors, I study how bank lenders respond to a legal change that strengthens the rights of securitization creditors. Improving the power of securitization creditors to seize their collateral in bankruptcy reduces their incentives to maximize recoveries in chapter 11, increasing the risk of other competing creditors, such as banks. I find that loans granted to firms using asset securitization have higher interest rates, higher fees, smaller size, and more covenant restrictions after the law change. These effects are stronger for firms with higher default risk, for which the legal change may have a bigger impact. My findings thus highlight how increasing the power of some corporate creditors affects financial contracts of the other creditors.

Keywords: Creditor rights, Bankruptcy, Incentive Conflicts, Financial Contracting, Bank Loans, Securitization, Anti-recharacterization Law.

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1 Introduction

There is an extant body of research on the implications of creditor protection on financial development and economic growth (La Porta et al. (1998), King & Levine (1993), Beck et al. (2000)). However, little is known about the channels through which creditor rights influence economic outcomes. This paper provides evidence on one such channel by studying the impact of creditor rights on debt contract design. This potential mechanism is important since corporate debt is the main source of external financing for companies. Further, debt contracts enable firms to mitigate market frictions and facilitate financing, thereby affecting investments and economic output (Rajan & Zingales (1998)).

One major impediment to debt financing is the collective enforcement problem arising from coordination failures among creditors in bankruptcy (Aghion et al. (1992)). An important function of creditor rights is thus to protect a debtholder's claim against that of other creditors when a firm becomes insolvent. Focusing on this function, I study how improving control rights of some corporate creditors in bankruptcy impacts the lending practices of competing creditors and their debt contracts. In particular, I examine how empowering asset securitization creditors, by making them the most senior debtholders, influences contracting terms of corporate bank loan.

Employing a legal reform as a positive exogenous shock to the rights of securitization creditors, I find that banks subsequently charge higher interest rates on loans granted to firms using asset securitization. Further, these loans have higher fees, are smaller in size, and contain a greater number of restrictive covenants after the law change. My findings suggest that banks respond to their weaker bargaining power and higher costs of financial distress by imposing stricter lending standards to firms using securitization. The novelty of my paper is in revealing unintended consequences of granting more control rights to some creditors, as they may adversely affect other creditors' debt contracts.

The legal reform used in this study is the Anti-Recharacterization statute, passed in Delaware in 2001, which applies to firms exploiting asset securitization. Financing through securitization entails the originator company transferring the ownership of assets, usually in the form of accounts receivables, to a special purpose vehicle (SPV) and then borrowing

against these SPV assets. Since an SPV is a legally distinct entity from the originator company, the transfer of ownership to SPV provides a special protection to securitized assets, called bankruptcy remoteness. Under this protection, SPV assets are isolated from any future bankruptcy of the originator company (Ayotte & Gaon (2011)). However, bankruptcy courts may decide to *recharacterize* the transfer of assets to the SPV and instead consider it a loan secured by those assets, entirely ignoring the bankruptcy remoteness feature.

Since collateral in a secured loan is subject to automatic stay, recharacterization makes the SPV assets as the property of the originator company, and thus prevents securitization creditors from accessing their collateral in the SPV. To prevent this, the Anti-Recharacterization statute (AR statute henceforward) completely removes the possibility of recharacterization under any circumstances. The AR statute thus significantly improves the rights of the securitization creditors by allowing them to promptly seize SPV collateral in bankruptcy (Kettering (2008)). Therefore, the enactment of the AR statute provides a unique setting to examine the causal effect of creditor rights on firms' financial contracts, particularly on bank loan agreements¹.

The impact of the AR statute on bank loans is far from straightforward; on the one hand, firms use SPVs to serve several economic goals, such as lowering financing costs, accessing segmented debt markets, isolating financial risk, and offering tax benefits (Feng et al. (2009); Lemmon et al. (2014)). As a result, allowing securitization creditors to enforce their contracts might help the originator company to reduce financing frictions and expand its borrowing capacity, increasing the value of financially constrained firms. These effects are in the collective interest of all of the debtholders, here securitization creditors and banks, and could thus motivate bank lenders to provide funding at more favorable contracting terms to borrowers using securitization financing.

On the other hand, strengthening the rights of securitization creditor might create adverse effects on other lenders to the originator company. Conflict of interest between debtholders in bankruptcy may lead to inefficient outcomes, such as excess liquidation (Aghion et al. (1992)).

¹According to the legal literature, the Anti-Recharacterization statute is the most important act passed in securitization transactions setting (Kettering (2010)). The statute was enacted in Delaware in July 2001.

Consequently, increasing the power of securitization creditors to seize their collateral may lower the likelihood that the originator company continues as a going concern and intensifies the risk of other creditors, such as bank lenders. In response, banks may set stricter contract terms, such as higher interest rates and fees, and more restrictive covenants. Overall, the impact of the AR statute on bank loan contracts is eventually an empirical question.

I focus on bank loans since banks are the dominant supplier of capital to corporations and play a special role in screening and monitoring their clients (Diamond (1984), Ma et al. (2019)). Therefore, bank lenders are capable of having a large impact on corporate borrowers and their policies (Chava & Roberts (2008), Roberts & Sufi (2009)). In addition, bank loans provide detailed information on several dimensions of debt contracts. That makes it possible to conduct a comprehensive investigation of banks' reaction to the AR statute through studying both loan pricing terms (interest rate, loan fees) and non-pricing terms (loan size, maturity, and covenant structure).

To conduct the analysis, I use hand collected information on the usage of asset securitization financing by non-financial firms, from 1997 to 2005, and match it with data on bank loan contracts from LPC DealScan. I employ a difference-in-difference framework, in which companies using asset securitization form the treatment group. 345 firms are identified in my sample that use SPVs for securitization funding (SPV firms). Those firms exhibit different characteristics from companies not using asset securitization.² For instance, SPV firms are more than two times larger than the average firm in my sample. Therefore, to mitigate concerns related to observable differences between SPV firms and the control group, I conduct the main analysis of this paper on a propensity-score matched sample of firms. The resulting final sample consists of 19073 loan facilities to a total of 661 firms.

My study delivers three sets of main results. I first present evidence that securitization creditors' rights affect pricing terms of corporate bank loans. Using "all-in-drawn spread" (AIDS) as the key measure of the cost of loans, I find that banks increase interest rate spreads

²Lemmon et al. (2014) study the characteristics of nonfinancial firms using asset-backed securitization (ABS) and document that ABS firms are much larger and older compared to the typical firm in their industry and are placed in the middle of credit quality distribution. They also find that ABS users have larger amount of receivables on their balance sheets.

on loans granted to SPV firms after the legal change. I show that even after controlling for various firm characteristics, loan features, macro-economic variables and a set of fixed effects, loan spreads to SPV firms increases by 15% after the enactment of the AR statute. In addition to loan spread, I examine several types of loan fees. The results indicate that banks subsequently charge SPV firms with higher commitment fee (by 9%), annual fee (by 14%), and letter of credit fee (by 8%).

In the second set of results, I document the impact of the AR statute on non-pricing terms of loan agreements. I find that bank loans contracted with SPV firms include a greater number of covenants after the law change. This result is consistent with previous findings in the literature that banks use covenants as an effective tool to monitor firms' financial health and their ability to repay debt (Chava & Roberts (2008), Roberts & Sufi (2009)). I interpret my result as evidence that banks seek to add protection for themselves by imposing more covenants on loans borrowed by firms using securitization. All else equal, a contract with more restrictive covenants provides more contingent control to bank lenders and reduce the risk of banks' loss. I further examine what types of covenants are more likely to be included in loan agreements of SPV firms. I document that banks are more likely to include both financial covenants (including interest coverage, net worth, leverage, profitability) and sweep covenants (including excess cash flow, asset sales, dividend payout and debt issuance activities) on their loan contracts. These findings show that banks simultaneously increase the use of several types of covenants to monitor SPV firms, indicating the results are not driven by the increase in just one particular type.

In addition to covenant structure, I investigate the impact of the AR statute on the size of bank loans. I find that loan size to firms using securitization decreases by about 10% after the enactment of the AR statute. The reduction in loan amounts impose additional costs on SPV firms and may offset the effect of extra credit financed through securitization. Therefore, to understand the overall effect of the AR statute on SPV firms, I also examine how corporate policies and firm performance change after the reform. My findings indicate that SPV firms subsequently decrease their financial leverage and increase their cash holdings. Further, I find that the AR statute results in a decrease in corporate investment and profitability of firms using securitization.

After establishing the impact of the AR statute on bank loan features, I investigate through what channels creditor rights affect loan contracts. Bank lenders would be more concerned about stronger power of securitization creditors and their expected loss in bankruptcy when an SPV originator firm has higher risk of financial distress. Consistent with this intuition, I find that the effects of the AR statute is intensified for smaller firms, firms with low z-score and firms with high amount of accounts receivables, which is a commonly used asset for securitization financing.

To test the robustness of my results, I conduct a dynamic analysis, showing that the effect of the AR statute on loan contract terms of SPV firms is not significant prior to the passage of the law. I also document that the most significant impact on bank loans is observed right after the law enactment, in the third quarter of 2001. These results provide more supportive evidence for the effectiveness of the AR statute. In addition, I conduct a placebo test, falsely assuming SPV firms in the neighboring states of Delaware as treated. The result of the falsification test is not significant, implying that the effect captured in this analysis is not arising from other causes such as macroeconomic condition affecting firms in neighboring locations.

This study is related to several strands of literature. First, my paper contributes to the literature on the impact of creditor rights on financial contracting. [Qian & Strahan \(2007\)](#) find that in countries with strong creditor protection, loans are associated with more concentrated ownership, longer maturities, and lower interest rates. [Bae & Goyal \(2009\)](#) show that banks respond to poor enforceability of contracts across countries by reducing loan size, shortening maturities, and increasing yield spreads. Although these two papers show that there is a link between creditor rights and loan terms, this paper is the first study to provide casual evidence on the effect of creditor right on loan contracting.

My paper is also broadly related to a large body of literature on the importance of creditor rights for corporate finance and real economic activity. Two contradictory views exist in the literature; one strand of theories suggests that if creditors are able to force debt repayments, take state-contingent control of the firm or fully realize their collateral, they are more inclined to extend financing. Consequently, better creditor protection promotes lending behavior and decreases the cost of external financing, thereby fostering financial development

and leading to economic growth (Aghion & Bolton (1992), Hart & Moore (1994), Townsend (1979)). Empirical studies supporting this view provide evidence that the degree of creditor legal protection and the quality of law enforcement across countries is positively correlated with the size of capital markets and financial development (La Porta et al. (1997), Levine (1997)). Consistently, the supply of credit has found to be larger in creditor-friendly legal environments (Djankov et al. (2007), Haselmann et al. (2010)).

In contrast, another view in the literature has questioned the favorable effects of high levels of creditor protection, highlighting consequences arising from strong creditor rights in bankruptcy such as excessive liquidation (Shleifer & Vishny (1992), Aghion et al. (1992), Hart et al. (1997)). According to this demand view, empowering creditors induces companies to take more conservative policies to decrease the risk of financial distress. (Vig (2013), Alderson & Betker (1995)). For instance, firms choose to decrease leverage if the costs of stronger creditor rights dominates the positive effects on credit supply. Previous research has shown that under procreditor bankruptcy laws, managers take more diversifying and value-reducing acquisitions in which the target firm has high recovery value in bankruptcy (Acharya et al. (2011)). Managers also tend to hoard high-recovery fixed assets that can easily be converted into cash and reduce bankruptcy risk (Hart et al. (1997)). The results of my paper on corporate policies could be in line with this second view.

My paper also adds to the recent research exploiting anti-recharacterization law as a natural experiment to study creditor rights. These studies examine the effect of the AR law on capital structure decisions (Li et al. (2016)), patenting and innovation (Mann (2018)), firm precautionary behavior (Favara et al. (2019)) and corporate productivity (Ersahin (2019)). While these papers document the effects of stronger creditor rights on firm outcomes, my paper highlights the unintended consequences of the AR statute on corporate debt contracts. A key distinguishing feature of my paper from these previous studies is the use of information on corporate asset securitization in the analysis. Although the AR statute mainly applies to firm using securitization financing, none of the previous papers use data on asset securitization to identify which firms are actually engaged in securitization process. Rather, they simply assume the use of securitization financing to be prevalent and thus consider all firms located in states passing the AR statute to be subject to the law. This is in sharp contrast to the

finding by [Lemmon et al. \(2014\)](#) which shows that only about 10% of publicly traded firms used securitization. Using a hand collected data, I identify firms using asset securitization financing and only consider those set of firms as the treated group in my study.

Finally, this study contributes to the recent literature on bank loan contracting, identifying the key determinants affecting the terms of loan agreements. Previous studies have highlighted the role of multiple factors including product market competition ([Valta \(2012\)](#)), customer concentration ([Campello & Gao \(2017\)](#)), corporate misreporting ([Graham et al. \(2008\)](#)), distance-related informational frictions between borrower and lender ([Hollander & Verriest \(2016\)](#)) and supply-chain relations ([Cen et al. \(2015\)](#)). My paper adds to this literature by shedding light on the effect of creditor rights on loan contracting.

The rest of the paper is organized as follows. Section 2 provides a detail explanation of the natural experimant used in this analysis and the importance of the AR statute to users of securitization debt. Section 3 presents the data and summary statistics. Section 4 describes the empirical methodology of the paper. Section 5 presents the main results and Section 6 provides further robustness tests. Finally, section 7 concludes.

2 Natural experiment: Anti-Recharacterization statue in bankruptcy

Corporate asset securitization mechanism begins with an originator company creating a special purpose vehicle (SPV), and then transferring securitization assets to this vehicle. SPV, which is a legally separate entity from the borrowing company, has a limited life and has no other purpose than to carry out specific financing transactions. In a securitization setting, SPV can either borrow directly or use a trust to borrow on behalf of itself, then passing the funding raised back to the company. A key advantage of securitization financing is bankruptcy remoteness feature, which implies that SPV assets are not considered as part of the borrowing firm's bankruptcy estate. This special characteristic of securitized debt is highly valued by creditors to such an extent that the outstanding volume of asset-backed

securities has been more than \$1.5 trillion in the U.S. in 2019³.

Asset securitization in non-financial firms mainly involves financing against accounts receivables (Kettering (2008), Lemmon et al. (2014)). The result of receivables securitization is economically similar to a loan secured by those receivables. However, their main difference is that securitization structure removes the constraints imposed by bankruptcy code on a secured loan creditors, specifically the expected loss arising from the power of the bankrupt company, as debtor in possession, to obtain the use of any cash collected from the secured loan collateral (Gorton & Souleles (2006)).

In receivables securitization, the originator company transfer the ownership of collateral to SPV. This transfer of ownership to a legally separate vehicle is the underlying mechanism causing bankruptcy remoteness feature of securitized debt. Therefore, to keep the bankruptcy avoidance protection, it is critical for securitization structure that courts treat ownership transfer to SPV as a "true sale" of assets and do not *recharacterize* it as a secured loan. *Recharacterization* has such importance to securitization that rating agencies evaluate the credit quality of asset-backed debt based on whether the transfer is going to be considered as a true sale or a secured loan (Ayotte & Gaon (2011)).

Since collateral in a secured loan is subject to automatic stay, recharacterization would allow the originator company to claim SPV assets as the property of its bankruptcy estate. The main problem of distinguishing between a true sale and a secured loan is that the Article 9 of Uniform Commercial Code (U.C.C.), which governs the laws of secured transactions, does not provide any rule on whether moving assets to SPV should be categorized as a sale or a security transfer. Hence, court judges have been on their own in true sale analysis and made decisions based on their intuition of recharacterization doctrine, resulting in a chaotic state of the case law (Kettering (2010)).

Historically, the purpose of recharacterization was to establish a tool in favor of debtors, mitigating the punitive consequences of the enforcement of a contract that allows creditors to retain the whole ownership of assets whose value may exceed the underlying debt. The degree of debtor protection under recharacterization varied with time and particular jurisdiction.

³According to statistics provided by Securities Industry and Financial Markets Association (SIFMA)

Early in the evolution of the doctrine, the protection only called for an extension of the maturity date and creditor would become the whole owner of the collateral if the debt was not paid off by the end of the extension period. In the later evolution, debtor's protection was supplemented by requiring collateral to be sold after the extension period, with the proceeds first reimbursed creditors and any surplus paid to the debtor. Debtor rights later became nonwaivable. In the current law practice, Article 9 provides the same set of non-waivable debtor provisions, including debtor's right to redeem the collateral and debtor's right to receive the surplus from the collateral, which justify recharacterization in a secured transaction setting ([Kettering \(2008\)](#)).

Generally, the cluster of debtor provisions of Article 9 applies only to debtors in secured loans, but not to debtors in securitization transactions. However, under specific circumstances courts may find it coherent to apply recharacterization also in securitization setting. Specifically, when courts believe that the consequences of exercising recharacterization could be in the interest of both the debtor and the general public, judges have a strong argument to recharacterize receivables' sales. Accordingly, the application of recharacterization is highly likely when a bankrupt company claims that proceeds from receivables are necessary for its successful reorganization and judges conclude that the society would benefit more from the organization of the bankrupt firm than the liquidation.

To avoid recharacterization in cases where it is easily justifiable by courts, considerable legal effort was exercised and finally the Anti-Recharacterization (AR) statute was enacted in Delaware in 2001, entirely precluding the possibility of the recharacterization in securitization transactions ([Kettering \(2010\)](#)). The AR statute gives securitization creditors the right to retain swift and complete access to SPV assets in case of the originator firm's bankruptcy, even when SPV assets are needed to support reorganization. Considering the critical role of the AR statute for asset securitization creditors, I exploit this legal change as a natural experiment to study the causal effect of creditor rights on bank loans.

In theory, the AR statute may act in favor of or against bank creditors. Securitization allows firms to gain access to segmented parts of the debt market by isolating the credit risk of securitized debt from that of the originator company. Therefore, stronger rights to securitization creditors may enable firms to boost their borrowing capacity and reduce

cost of capital. Firms can employ the extra capital raised through securitization financing for different corporate purposes. For instance, [Lemmon et al. \(2014\)](#) find that companies extensively use the proceeds from securitization to repay their existing debt. In addition, SPVs can offer other economic benefits to the originator company such as receiving tax advantages, adopting more favorable accounting treatments and avoiding regulations ([Gorton & Souleles \(2006\)](#)). These advantages to the originator company could motivate bank lenders to promote more attractive contract terms.

On the contrary, the AR statute might have some unfavorable impacts on the originator. For example, since usually low-risk assets are used for securitization purposes, moving safe assets to SPVs may heighten the risk of the remaining debt on firm's balance sheet, leading to a higher probability of default. In addition, stronger rights of securitization creditors increases the probability of assets liquidation in bankruptcy and thus results in higher failure rate of reorganization processes. Since the two abovementioned effects have opposite predictions over how the AR statute affects bank loan contracts of SPV originator companies, I empirically examine which of the contradicting effects dominates.

3 Data and descriptive statistics

I use data on bank loans along with information on firms use of asset-backed securitization and firms characteristics for the analysis of this paper. I begin with all loan contracts from January 1997 to December 2005, collected from the Reuters Loan Pricing Corporation (LPC) DealScan database. DealScan covers a significant fraction of the U.S. loan market and offers information on contract terms through SEC filings, creditors' self-reporting, and its staff reports. Loan data in DealScan is provided on "facility-level" and "package-level", consisting of several facilities. Since this paper examines multiple dimensions of loan contracts, I use both facility level and package level data.

To construct my sample, I remove loans (1) with missing facility identifier, (2) with missing or zero principle amount, and (3) not denominated in USD. Applying these filters results in a sample of 135577 loan facilities. I then collect data on borrower characteristics from quarterly Compustat and merge it with loan facilities using DealScan-Compustat link

provided by Michael Roberts and Sudheer Chava ([Roberts & Sufi \(2009\)](#)). My sample is restricted to Delaware-incorporated companies. I also exclude (1) firms from financial sector (SIC codes between 6000 and 6999) and regulated industries (SIC codes between 4000 and 4999) and (2) firms with missing or zero total asset value.

I then add to these data information on asset-backed securitization. Data on firms' use of SPVs for securitization financing is collected from firms' 10-K filings with the SEC EDGAR. I create a dummy variable for SPV usage which is equal to one if a firm initiates an SPV at least once in its life time. I identify 345 Delaware-incorporated firms using securitization financing in my sample and define this set of firms as the treated group, out of which 315 companies use bank loans during the sample period.

Merging data from all three datasets results in a sample of 71079 bank loans to 3632 Delaware-incorporated companies. In total, there are 11679 loans granted to the originator companies of SPVs and 59400 loans to firms not using securitization programs (the control group). Figure 1 depicts the distribution of loans granted to treated and control firms over time. Although there is more variation in the number of loans borrowed by firms not using securitization funding, the two groups generally follow the same trend.

For the main analysis of this paper, I employ a matched sample difference-in-differences estimation, which leads to a final sample of 26104 loans to 778 firms. Figure 2 shows the distribution of loans to SPV originator companies and the matched control sample. As shown in figure 2, the distribution of the matched control sample is more similar to that of the treated firms, compared to the distribution of non-matched sample in figure 1.

3.1 Summary statistics of the whole sample

Table 1 presents summary statistics for the pricing features of loan contracts. I use loan spread, which is gauged by the all-in-spread drawn (AISD) variable in DealScan, to measure the cost of bank loans. AISD is equal to the interest rate spread over London Interbank Offered Rate (LIBOR) for each dollar drawn down plus the annual fee. Since considering only yield spread is not sufficient to fully capture the richness of the pricing structure of loan contracts ([Berg et al. \(2016\)](#)), I also examine several types of bank loan fees, in addition to AISD. I consider the most frequent types of loan fees including commitment fee, letter of

credit fee, annual fee⁴, upfront fee, utilization fee and cancellation fee.

Table 1 further reports descriptive statistics for non-pricing terms of loan contracts including facility amount (million USD), maturity (months), whether the loan is syndicated (Y/N), seniority level and the number of covenants included in the loan contract. Definition and measurement details of all variables are reported in the Appendix.

Panel A describes statistics for the entire sample of bank loans whereas Panel B provides statistics for loans borrowed by firms using securitization financing. The average loan spread for the treated firms is 164.6 bps while the loan fees vary from 12.9 bps to 156.3 bps. The average size of the treated loans is 475 million USD and the maturity is around 4 years on average. Almost all the treated loans are funded by a syndicate of lenders, indicate high seniority levels and include on average three covenants.

Based on the statistics in Panel C, the mean loan spread for firms in the control sample is 58.81 bps higher than for the treated firms. The cost of loan fees are also higher for the control sample. The average loan size of the control firms is about 10% of their book asset value and is considerably smaller than the average loan size of treated firms. In addition, loans to control firms are less likely to be syndicated and include a higher number of financial, net worth and negative covenants.

Table 2 provides the descriptive analysis for the main borrower characteristics including Book Assets (million USD), Market capitalization (million USD), Total Debt, Cashflow, Accounts receivable, Market-to-book ratio, Leverage, Profitability, Tangibility, Cashflow to assets ratio and Accounts receivable to assets ratio. Panel A describes the summary statistics for all firms in the sample, Panel B describes the statistics for the treated firms and Panel C reports the same for the control firms.

Comparing panel B and C indicates that firms using SPVs for securitization financing have much larger book value of assets and market capitalization than the control group. The average SPV firm is more than three times larger than non-SPV firm in my sample. Since creating a securitization program involves substantial fixed costs, companies originating SPVs tend to be relatively large. In addition, SPV firms have higher leverage on their

⁴Annual fee is usually called "facility fee" in credit agreements

balance sheet compared to the control sample, although there is not a significant difference in profitability and tangibility between the two groups. Furthermore, both the ratio of cash flow to assets and accounts receivable to assets are significantly higher for firms originating SPVs for securitization purposes.

3.2 Propensity score matching

The decision of initiating a SPV for financing is most likely to be endogenous and firms using securitization programs have different characteristics from those not benefiting from such programs, as shown in Table 2. Therefore, to rule out concerns that the results of this study could be driven by selection bias, I employ a propensity score matching (PSM) strategy (Heckman et al. (1998)). The ideal setting for my analysis would be to randomly assign firms to treatment and control groups and then compare the consequences of the AR statute on the two groups. However, in realworld it is not possible to observe what would be the outcome of a firm using SPVs had it not chosen to employ securitization structure. For that reason, I match each firm in the treatment group with a firm in the control group that have the same likelihood of using a securitization program ex-ante.

I estimate the PSM model by using a probit regression, where the dependent variable is a dummy which takes the value one for securitization users and zero otherwise. The control variables in the probit model include the natural logarithm of book assets, market-to-book ratio measured as market value divided by book assets, leverage defined as total liabilities scaled by lagged assets, profitability defined as the ratio of net income to lagged assets, tangibility defined as PP&E scaled by lagged assets, cash flow ratio defined as cash and short-term investments scaled by lagged assets, and accounts receivable ratio defined as accounts receivable scaled by lagged assets as well as year and industry dummies. The matching is applied without replacement and the maximum difference in the propensity score allowed for a match is 0.01.

Table 3 presents the regression estimation and the matching results. Panel A of Table 3 reports the results from the probit regression. As shown in column (1), in the pre-matched sample, firms using securitization differ from the control group in some key firm characteristics. After implementing the PSM technique, the results show no statistically significant

difference in the matched sample, as reported in column (2). Furthermore, Panel B of Table 3 compares the pre-matched SPV firms and non-SPV firms based on the variables that are used to compute the propensity scores. As the results of univariate t-tests in Panel B show, before applying the matching process SPV firms are significantly different from non-SPV firms in several characteristics including firm size, market-to-book ratio, leverage, profitability and cashflow to assets ratio. Panel C of the table reports the same univariate comparisons after the matching process. For all the variables, the results in Panel C exhibit no significant difference between SPV and non-SPV firms, suggesting that the resulting matched sample satisfies the important validity criteria of PSM technique.

3.3 Summary statistics of the matched sample

Table 4 presents summary statistics for the matched sample before and after the enactment of the AR statute. Mean, standard deviation, median, the number of observations and univariate t-tests of difference in means between the pre-enactment and the post-enactment period are reported in Table 4. Panel A of Table 4 shows descriptive statistics of loan contract terms for the treated sample. The mean loan spread of treated firms increases from 170.44 basis points over LIBOR before 2001 to 186.53 basis points afterwards. Further, treated firms pay higher commitment fees and letter of credit fees after the enactment of the AR statute. The changes in loan amount of SPV firms is not significant but loan maturity is longer after 2001.

In addition, the number of financial covenants and sweep covenants increase on loans granted to SPV firms in the post-enactment period. Treated loans are also more likely to include different types of financial covenants (including investment, profitability, interest coverage and excess cash flow) and sweep covenants (such as asset sales, debt issuance and equity issuance). The only exceptions seem to be leverage and liquidity covenants, which have lower probability of inclusion in the post-enactment period.

Descriptive statistics in Panel B of Table 4 show that banks charge higher loan spread, upfront fee and cancellation fee on loan contracts of control firms, while utilization fee significantly drops for non-SPV firms. In addition, loans in the control sample have larger amount and shorter maturity after 2001. In terms of covenant structure, loans to control

firms seem to have lower number of financial covenants whereas there is no major change in the number of sweep covenants. loans to non-SPV firms also become more likely to include specific types of financial covenants (including investment covenant and profitability covenant) as well as some types of sweep covenants (including excess cash flow, asset sales, debt issuance and equity issuance). Table 5 presents the correlations between the variables in the sample. As expected, many of the loan contract terms and firm characteristics are correlated. The largest correlations occur between loan spread and loan fee variables, as reported in Table 5.

4 Empirical methodology

I employ a the difference-in-difference model employed to estimate the effect of the AR statute on bank loan contracts. A critical assumption of DID model for estimating causal effect is that the treatment and control group should follow a similar trend in the absence of the experiment. I thus use a propensity score matching approach for the analysis of this paper to address concerns arising from fundamental differences between the treatment and control group. Using the matched sample of firms, I estimate the following specification model:

$$LoanTerm_{ijt} = \alpha_t + \beta \times Post_t \times Treated_i + \gamma \times Treated_i + \eta \times X_{ijt} + \epsilon_{ijt} \quad (1)$$

where the dependent variable, $LoanTerm_{ijt}$, represents the specific contracting terms of the loan j of company i at time t . Loan terms investigated in this study include yield spread, loan fees, covenant structure, loan size and loan maturity.

$Treated_i$ is a dummy variable which is equal to one for firms using SPVs for securitization financing and zero otherwise. $Post_t$ is an indicator variable, which takes the value one for years after the enactment of the AR statute. The main variable of interest on the right-hand side is the interaction term between $Post$ and SPV dummies, which is equal to one for firms using securitization after 2001. The coefficient of the interaction term, β , thus captures whether stronger rights to securitization creditors induce banks to adjust the design of loan contracts for SPV originating companies relative to the matched sample of firms.

Previous research has found that the structure of bank loans is associated with firm fundamentals and macroeconomic variables and may vary across industries and time periods (Campello & Gao (2017), Graham et al. (2008)). Therefore, I control for the other known determinants of loan terms, X_{ijt} , in my specification including firm characteristics, loan-level variables, macroeconomic factors, time fixed effects, industry fixed effects, loan-type fixed effects and loan-purpose fixed effects. Firm-level variables include firm size, market-to-book ratio, leverage, profitability, tangibility, cash flow ratio and accounts receivable ratio. Loan variables include the natural logarithm of loan amount, denoted by the variable *Facilityamount* in my regressions, and the natural logarithm of loan maturity, denoted by *Maturity*. I also add two economy-wide control variables including credit spread, measured as the difference in yield between the BAA-rated and AAA-rated corporate bonds, and term spread, defined as the difference in yield spread between the 10-year and two-year U.S. Treasury bonds. I further control for time-specific and industry-specific variations in the model by including quarter fixed effects and 3-digit industry fixed effects.

Moreover, I create indicator variables for the main loan types in the sample including revolving loans, term loans, and 364-day facility. Revolving loans, which enable borrowers to draw down capital over time, make up the majority of the loans in my sample. Term loans, which require a complete withdrawal of funds at the beginning of the contract, form the second-largest group. 364-day facility composes the third-largest type of loans in the sample, mainly used to avoid the capital allocation banks are required to make on unfunded commitments of a year or more. To consider the other loan types, I then generate a dummy variable representing the remaining types of loan contracts in my sample.

In all the regression specifications, I also control for loan purposes by including a dummy variable representing the four major loan purpose categories in the sample. These categories include: general purposes (general corporate purpose and working capital), recapitalization (debt repayment, debtor-in-possession, recapitalization), acquisition (acquisition lines, LBO, MBO, takeover) and other loan purposes. Further, I winsorize all variables at the top and bottom one percentiles of their respective distributions, to reduce outliers bias. Standard errors are clustered at the firm level and are corrected for heterogeneity.

5 Empirical results

5.1 Effect of creditor rights on the interest cost of bank loans

This section provides systematic evidence on the impact of strengthening securitization creditor rights on loan contracts. I begin with investigating the effect of the AR statute on the cost of bank loans. The regression model is as described in Equation (1) where the outcome variable is the natural logarithm of the loan spread, $\log(\text{AISD})$. Table 6 presents the regression estimates using several specifications. In column (1), I only include the interaction term $Post \times Treated$, $Treated$ dummy and quarter-fixed effects as independent variables. The coefficient of the interaction term, β , is significant and positive, implying that after the enactment of the AR statute firms using securitization experience a rise in their loan spreads by about 35%. The magnitude of β confirms that the effect of the AR statute is economically significant.

Next, I append to the baseline model various loan and borrower characteristics that previous research has found to be related to the cost of bank loans (Lin et al. (2011), Graham et al. (2008), Qian & Strahan (2007)). The specification in column (2) includes loan control variables, showing that β remains significant at the 1% level, although the magnitude of the effect drops to 18%. Column (3) adds firm-specific controls to the regression model. The results in column (3) report that the estimated effect is also robust to the inclusion of borrower characteristics. Consistent with the literature, results in column (2) and (3) show that larger loan size, larger borrower size, higher market-to-book ratio, higher profitability, and higher cashflow to assets ratio tend to be associated with lower cost of borrowing. Moreover, loans with long maturities and loans granted to firms with high leverage have higher yield spread.

Column (4) and column (5) further add controls for industry fixed effects and macroeconomic factors to the model whereas column (6) and (7) add respectively loan-type fixed effects and loan-purpose fixed effects. The estimates of β in columns 4-7 are almost similar in magnitude and remain statistically and economically meaningful. The results of Table 6 thus confirm the causal effect of stronger SPV creditor rights on bank loan spread. If the passage of the AR statute was not important from bank lenders' perspective, β estimates

would not be significant. However, my results using a series of different specifications reveal a strong effect, suggesting that bank lenders become concerned about the consequences of the AR statute and react to the increased power of securitization creditors by raising the cost of bank loans by 15% on average.

5.2 Effect of creditor rights on the cost of loan fees

I continue the analysis by examining the impact of the AR statute on loan fees, which constitute a key part of corporate loans. Loan contracts usually include option-like characteristics⁵ and loan fees are employed to compensate bank lenders for providing those options to borrowing firms (Thakor et al. (1981)). Fees also serve as a screening device to reveal borrowers' private information regarding embedded options in loan contracts. Although the majority of loans in the U.S. market include at least one type of fees, most of the studies in the literature ignore the role of contract fees in analyzing the pricing structure of bank loans, focusing merely on interest rate spread (Berg et al. (2016)).

Since fee structure depends on the type of loan facility, I divide my sample into two main categories of loan types, including credit lines and term loans. Table 7 reports the existence of the major types of loan fees in my sample. Column (1) of the table shows the frequency of each fee type in bank loan contracts whereas column (2) reports the percentage of contracts for which the particular loan fee is available. Column (3) and column (4) of Table 7 report mean and median values of loan fees in bps, as reported by Dealscan. For the analysis of this section, I focus on loan fees that exist in more than 20% of loan contracts in my sample, which include commitment fee, letter of credit fee, annual fee and upfront fee.

Panel A of Table 7 presents the most frequent fee types for credit lines, consisting of commitment fee (which is paid on unused amount of loan commitments), annual fee⁶ (paid on the entire amount of loan commitments, regardless of usage), upfront fee (paid once at the loan closing date) and utilization fee (which is applicable if utilization exceeds a threshold).

⁵For instance, borrowers can cancel a loan facility when the loan's interest rate is higher than the prevalent market rate and hence "upfront fee" or "cancellation fee" compensate lenders for granting this valuable option to borrowers.

⁶The annual fee is usually called "Facility fee" in credit agreements.

As shown in column (2) of panel A, 58% of credit lines include a commitment fee, 56% a letter of credit fee, 29% annual fee, 22% upfront fee, 12% utilization fee and 5.6% cancellation fee. The most expensive type of fees charged on credit line is letter of credit fee (176.38 bps on average) whereas the least expensive one is utilization fee (12.37 bps). Panel B of Table 7 reports the main fee types used in term loans including upfront fee and cancellation fee (that is applicable if the borrower cancels the contract before maturity). The usage of loan fees is less common for term loans compared to credit lines. As column 2 in panel B shows, the most frequent fee types in term loans are upfront fee (28%) and cancellation fee (11%). The average (median) upfront fee for term loans is 56.82 (50) bps and the average cancellation fee is 201 (200) bps.

Table 8 reports the results of estimating equation (1) using a particular loan fee, as the dependent variable, in each column. All the regression specifications in Table 8 control for loan-specific characteristics, borrower-specific characteristics, macroeconomic factors as well as quarter fixed effects, Industry fixed effects, loan type and loan purpose fixed effects. As shown in the first column of Table 8, commitment fees imposed on SPV originator companies increase by 9% after the enactment of the AR statute whereas annual fees rise by 13.6%, as reported in column 2. Column 3 of Table 8 shows that the letter of credit fees on loan contracts of firms using securitization subsequently increase by 8.4% while changes in upfront fee are not significant, as shown in column (4). Finally, column (5) of the table reports the result for term loans, indicating that the level of upfront fees for SPV firms do not change either in term loans after 2001. Overall, the results of Table 8 suggest that banks charge companies using securitization financing with higher commitment fees, annual fees, and letter of credit fees after the passage of the AR statute.

5.3 Effect of creditor rights on loan covenant structure

Thus far, I have analyzed the effect of creditor rights on loan pricing terms. I now continue the analysis by investigating non-pricing terms of loan contracts. In this section, I examine loan covenant design to shed light on how the passage of the AR statute affect ex-ante rights of bank lenders. Covenants provide state-contingent control rights to creditors when borrower performance deteriorates beyond the limit of the contract, granting creditors the power

to change the contract terms or restrict borrowers' behaviour following covenant violations (Roberts & Sufi (2009), Nini et al. (2012)). Covenant structure thus indicates the level of creditors' decision rights outside bankruptcy and creates monitoring incentives for lenders (Park (2000), Smith & Warner (1979)). Moreover, covenants can mitigate information asymmetries between borrowers and lenders and allow not well-informed lenders to lower their risk by imposing tight covenants on loan contracts (Garleanu & Zwiebel (2009)).

I use equation (1) to study how the AR statute affects the use of covenants in bank loan contracts. The results are presented in Table 9, using total number of covenants as the dependent variable. I first run a Poisson regression and report the average partial effect of the statute and then conduct a standard OLS regression. Panel A of Table 9 reports the results for financial covenants. Column (1) of Table 9 includes only the interaction term along with the treated dummy and quarter fixed effect. The coefficient of the interaction term is positive and significant, indicating that loans granted to SPV originator companies include a greater number of financial covenants after 2001. Column (2) include issue-specific, firm specific, and also macro economic control variables, which could affect the number of covenants in a loan contract. As the results in column (2) show, the coefficient of the interaction term decreases but remains significant at the one percent level. To further test the robustness of the results, column (3) adds industry, loan type and loan purpose fixed effects, reporting the coefficient to only change slightly.

Furthermore, I conduct the same analysis using OLS regression. Columns (4)-(6) present the results for different regression specifications. Across all columns (4)-(6), the interaction term, $Post \times Treated$, enters with a significantly positive coefficient, indicating the robustness of the results to the model choices.

In Panel B of Table 9, I repeat the analysis for the number of sweep covenants. The results obtained from the Poisson regression in columns (1) to (3), show that banks also impose more sweep covenants on loan contracts of SPV firms after the legal change. The results from the OLS regression first report a significant effect on the number of sweep covenants in columns (4). Although after adding control variables to the OLS regression, the magnitude and statistical significance of the interaction term drops considerably in column (5). Finally, controlling for industry, loan type and loan purpose fixed effects make the coefficient of the

interaction term insignificant in the OLS regression, as reported in column (6).

Overall, the results of Table 9 are consistent with the theory that banks use covenants to effectively monitor their borrowers. Therefore, after the passage of the AR statute, which raises the probability of banks' loss given default, bank lenders increase the number of covenants included in a loan contract of a firm using securitization, in order to obtain better control over the borrowing firm's performance.

Next, I examine whether the AR statute affects the likelihood of using different types of loan covenant. The analysis of this part sheds light to understand which types of covenants are mostly employed by banks to set restrictions on SPV originator firms. DealScan reports information on different types of covenants, collecting covenants' name and the corresponding restrictions on each ratio. For instance, financial covenants specify the range of thresholds on different accounting variables. Since some types of financial covenants serve the same purpose, I classify them into broader categories using DealScan data, as follows;

- *Interest Coverage covenants*: including restrictions on interest coverage, fixed charge coverage, debt service ratio and cash interest coverage ratio.
- *Net Worth covenants*: including restrictions on net worth and tangible net worth.
- *Leverage covenants*: including restrictions on leverage ratio, senior leverage, net debt to assets, total debt to tangible net worth, equity to asset ratio, debt to equity, loan to value, and debt to tangible net worth.
- *Profitability covenants*: including restrictions on debt to EBITDA, senior debt to EBITDA and EBITDA.
- *Investment covenants*: including restrictions on capital expenditures

Panel A of Table 10 reports the results for financial covenants. The dependent variable in the table is a dummy equal to one if the loan has at least one type of covenant included in each category. For instance, if a loan contract has a covenant restricting debt-to-equity ratio, the dummy variable indicating the existence of leverage covenants takes the value of one. The result of Table 10 indicate that banks are more likely to include interest coverage, net worth, leverage and profitability covenants on loan contracts of SPV firms after 2001.

I also examine different types of sweep covenants, including excess cash flow, dividend

payout, asset sales, debt issuance and equity issuance sweep. Each sweep covenant define a proportion of proceeds from the corresponding corporate activities that must be used to repay current debt. Hence, sweep covenants are effective in restricting firms' operational and financial policies. The results of Panel B in Table 10 indicate that bank lenders put more restrictions on excess cash flow, dividend policy, asset sale and debt issuance activity of firms using securitization, by imposing more corresponding sweep covenants on loan contracts of those firms.

5.4 Creditor rights's impact on other loan non-price loan terms

I continue the analysis by investigating the impact of stronger SPV creditor rights on the other non-price terms of loan contracts such as loan size and loan maturity. In column 1 to 4 of Table 11, I estimates Equation (1) using loan size, measured by the log of facility amount, as the dependent variable. Column 1 reports the baseline regression model whereas column 2 appends loan type dummies to the baseline model. Column 3 further adds industry fixed effects to the model and finally column 4 adds control variables and and loan purpose fixed effects. The result in column 4 of Table 11 indicate that banks reduce the loan size of SPV originator firms by approximately 10% after the enactment of the AR statute. My result is consistent with [Stiglitz & Weiss \(1981\)](#) argument and [Bae & Goyal \(2009\)](#) findings that as risk increases, banks ration credits to some borrowers and decrease the loan size.

Column 5 to 8 in Table 11 use loan maturity as the dependent variable. As shown in column (5), the coefficient of the interaction terms is significant in the baseline model. Although, after adding more controls the coefficient is no more significant. Therefore, as reported in column 8 of Table 11, banks do not significantly change the maturity of loans granted to SPV firms after the legal change.

5.5 Creditor rights's impact on firm policies

I further investigate how firms adjust their corporate policies in response to stronger creditor rights. I first examine the effect of the AR statute on financing policies by running the specification in Equation (??). Panel A of Table 12 reports the results. The dependent variable in columns (1) and (2) of Panel A is the natural logarithm of total debt, which is

defined as the sum of long-term and short-term debt. In column (1), I regress leverage on the interaction term between Post and Treated dummy, quarter fixed effects, firm fixed effects and industry fixed effects. Specification in column (2) further adds firm-level characteristics to the regression model, including firm size, market-to-book ratio and cashflow-to-assets ratio. The results in columns (1) and (2) indicate that the AR statute does not significantly change total debt amount of SPV firms relative to non-SPV firms. In column (3) and (4), I examine the impact of the AR statute on book value of firm assets. The results of regression in columns (3) and (4) indicate that treated firms significantly increase their assets after 2001. I then test how firms adjust their leverage in response to the legal change. The results in columns (5) and (6) indicate that SPV originator companies decrease their leverage by 0.012 in absolute terms (and by 3% for the average firm) after the passage of the AR statute. The results in Panel A indicate that the decline in leverage is mainly driven by the sharp growth in book assets value.

I continue the analysis by investigating firm cash and payout policy. Columns (1)-(2) in Panel B report the effect of the AR statute on total level of cash. As the results in columns (1)-(2) show SPV firms significantly increase their cash holding following the passage of the statute. I also examine the effect of the law change on cash ratio and find significant positive effect, as reported in columns (3) and (4). Columns (5) and (6) in panel B present the results for dividend policy, indicating that treated firms are significantly more likely to cut dividend payment following the legal change.

I also examine how firms adjust their investment in response to the AR statute. Results in panel C indicate that treated firms do not make a significant change in their capital expenditure but considerably decrease their acquisitions. Overall the results in Panel A-C is consistent with the demand view in the literature that firms take more conservative policy in response to stronger creditor rights, in order to decrease the risk of default.

Finally, in Panel D, I examine the effect of the AR statute on firms' performance. Using three measures of profitability, the results from all specifications in Panel D provide strong evidence that treated firms became less profitable after 2001, which could be the result of taking less risky projects or engaging in diversifying but value-reducing merger and acquisitions (Acharya et al. (2011)).

5.6 Heterogeneity in cross-sectional effects

After documenting the effect of increasing the protection of securitization creditors in bankruptcy on loan contracts, I examine whether this effect is heterogeneous across firms. The hypothesis is that the impact will be stronger for companies with high default risk. Employing several measures to proxy for corporate risk, I first sort the companies based on the corresponding riskiness proxy and then divide the sample at the median value of the measure.

Table 13 reports the heterogeneity effect of the AR statute on loan spread. In columns (1) and (2) of Table 13 firm size is employed as a proxy for riskiness. In columns (3) and (4) z-score serves as the measure of firm's default risk whereas in columns (5) and (6) the amount of accounts receivable, which is a commonly used asset for securitization financing, is used as a risk measure. The results of Table 13 indicate that the impact of the AR statute is intensified for firms that are hypothesized to be more risky, meaning smaller firms, firms with low Z-score and firms with high ratio of accounts receivable to assets. Therefore, Table 13 provides supporting evidence that strong creditor rights more adversely affect firms with higher default risk.

6 Robustness results

6.1 Dynamic estimation

In this section, I examine the robustness of my results. To mitigate the concerns related to spurious correlation that might drive the results, I test a dynamic version of Equation (1). If banks adjust loan terms mainly in response to the AR statute, then I expect to find the results right when the effect of the law materializes. Table 14 reports the estimates of the dynamic model for loan spread and loan fees. The interaction explanatory variables cover treated sample two year before and two year after the passage of the AR statute. For instance, $treated \times 1999$ is a dummy variable equals to one for SPV originator companies in 1999.

Column (1) of Table 14 show the results for loan spread. The coefficients on interaction dummies for the two year before the legal change, $treated \times 1999$ and $treated \times 2000$, are not significant. The interaction coefficients become significant from the first quarter of 2001.

Although the AR statute was enacted in July 2001, banks could anticipate the consequences of the passage of such an act and react to it in advance, which makes the coefficients on the two first quarters of 2001 significant. The magnitude and significance of the coefficient on the third quarter of 2001 further support causal interpretation of the AR law. Note that the effect is strongest in the third quarter of 2001 and gradually declines thereafter.

Column (2) of Table 14 reports the results of dynamic estimation for commitment fees. The effect on commitment fees turns on in the second quarter of 2001, increases most in the third quarter, and reduces subsequently. Columns (3) and (4) of Table 14 conduct the same analysis for letter of credit fee and annual fee, respectively and show a strong effect on 2001 third quarter. Thus, results in columns (3) and (4) add to the supporting evidence in favour of the role of the AR statute.

6.2 Placebo test

In order to conduct a placebo test, I falsely assume firms incorporated in the states bordering Delaware, i.e. Maryland, Pennsylvania, and New Jersey, as treated firms. Table 15 reports the results of the placebo test on loan spread. As the result in columns (1) to (5) of Table 15 show the coefficient of the interaction term in all specifications is insignificant, implying that the effect on loan spread are not driven by some macroeconomic or regional shocks influencing Delaware neighboring states.

7 Conclusion

Can creditor rights and the conflict of interest between debtholders impact firms' financial contracts? My paper is the first to provide causal evidence on how creditor protection affects bank loan contracts, using the enactment of Anti-Recharacterization (AR) statute as a natural experiment to identify exogenous shocks to the rights of securitization creditors.

The AR statute strengthens the control rights of the securitization creditors by providing them special protection in bankruptcy, guaranteeing that securitization assets are not subject to automatic stay and thus are not considered as part of the company bankruptcy estate. Giving securitization creditors full access to their collateral in bankruptcy reduces

the probability of the borrowing company continuing as a going concern, thereby heightening the costs of financial distress to other competing creditors and increasing the conflict of interest between debt holders ex-ante.

In this study, I provide evidence on how banks, as a major group of creditors, react to the passage of the AR statute. Examining multiple dimensions of bank loans, my results indicate that banks subsequently adjust their lending practices by increasing interest costs and fees on loans granted to firms using asset securitization. Bank lenders also impose more restrictive covenants and decrease the size of loans issued to firms using securitization after the law change. The stringency of contract design allows bank lenders to retain the option to terminate or renegotiate the loan if a firm's balance sheet deteriorates and the risk of default increases.

Stronger rights of securitization creditors raises the likelihood of asset liquidation in bankruptcy and results in higher failure rate of corporate reorganization process, increasing bank lenders' loss given default. Therefore, banks are expected to react more to stronger securitization creditor rights when company default probabilities are higher. Consistent with this idea, I find that banks' response to the enactment of the AR statute is intensified for firms with a higher default risk including firms with small size, low Z-score and high accounts receivables, which is a common asset for corporate securitization process.

My study addresses the unintended consequences of giving more control rights to some corporate creditors, showing that negative reactions from conflicting creditors cause adverse effects on corporate financing. This paper contributes to the growing body of research exploring the impact of creditor rights on corporate financial contracts and firm policies. Further, this study adds to the literature on bank loan contracting by identifying creditor rights as an important determinant of bank loan contractual features.

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A Figures and Tables

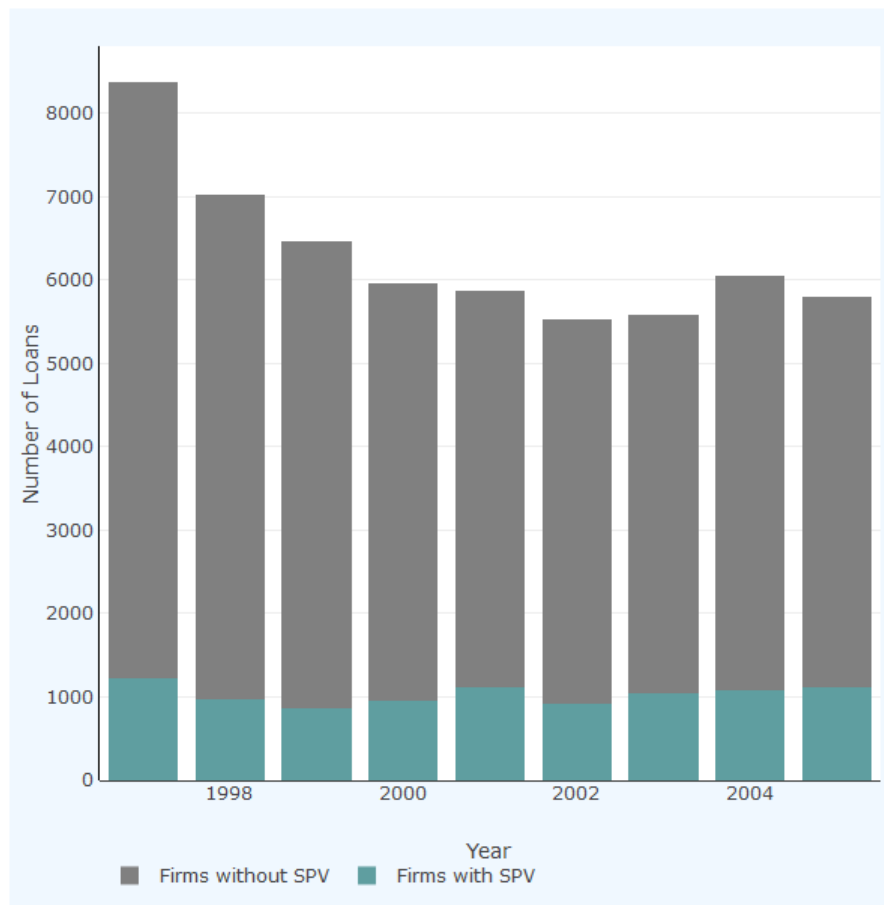


Figure 1 The Number of of Bank Loans over Time

This figure shows the number of the U.S. bank loans granted to non-financial non-utility Delaware-incorporated firms between 1996 and 2007. The data on bank loan contracts is collected from LPC DealScan and merged with borrower information in Compustat. Data on SPV usage based on firms' 10-k filings in SEC EDGAR is then added to these data. The final sample consists of 71079 debt agreements, out of which 11679 loans was borrowed by firms using SPVs and 59400 contracts belong to firms not originating a SPV.

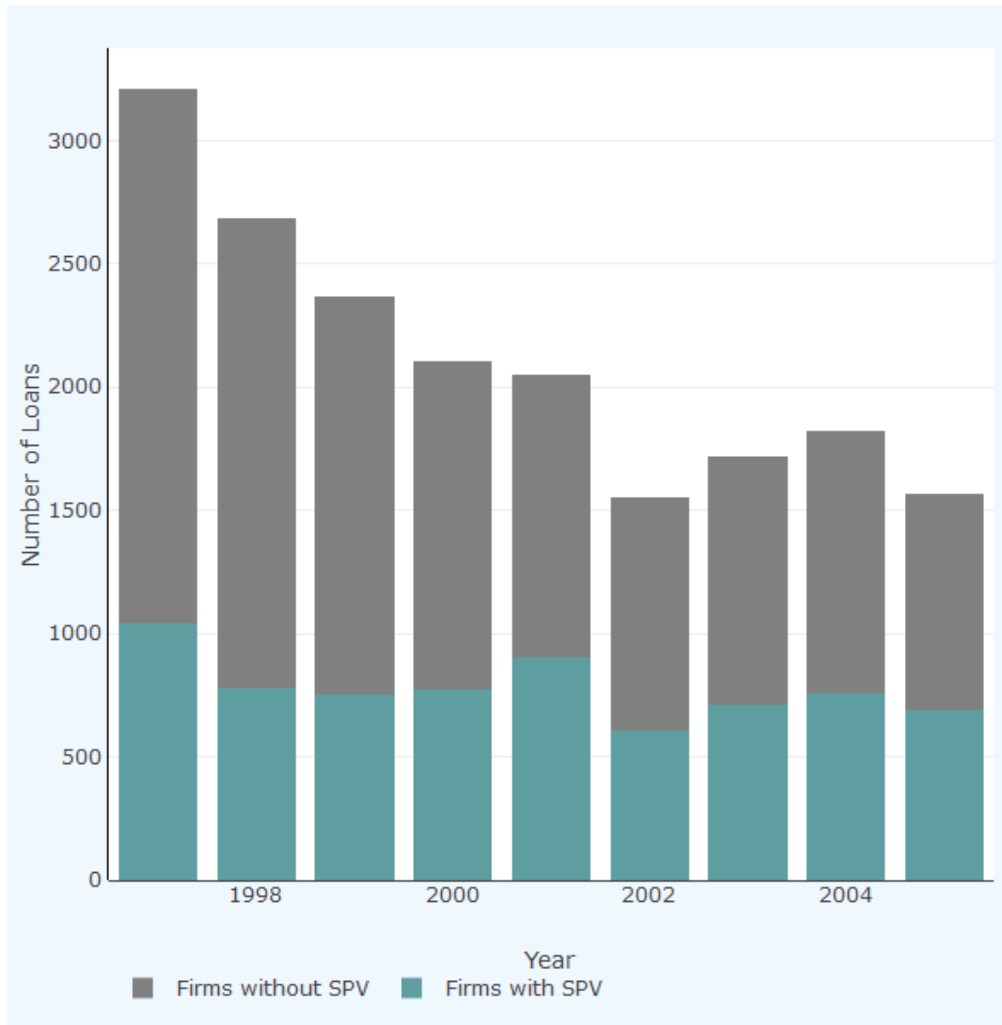


Figure 2 Distribution of the matched sample of Bank Loans over Years

This figure shows the number of banks loans borrowed by a matched sample of firms between 1996 and 2007, consisting of 26104 loan contracts to 778 Delaware-incorporated firms. Data on loan facilities is obtained from LPC Dealscan and information on firm characteristics come from Compustat. Information on firms using SPVs for securitization programs is collected from 10-k reports in SEC EDGAR electronic filings. Using a propensity score matching (PSM) approach, I select a control group of firms based on main firm characteristics and year and industry fixed effects. This results in a matched sample of 26104 loans granted to 778 firms.

Table 1 Summary Statistics of Loan Contract Terms

This table reports summary statistics on the key loan contract terms. Bank loans granted to companies incorporated in Delaware from 1997 to 2005 make up the sample of this study. I remove contracts (1) with missing loan identifier, (2) with zero or missing principle amount, (3) not denominated in USD, (4) to firms from financial and regulated industries, (5) to firm with missing or zero value of total assets. Applying these filters results in a sample of 71079 bank loans, collected from LPC DealScan. Mean, standard deviation (St.D.), minimum (Min), first quantile (Q0.25), median, third quantile (Q0.75), maximum (Max) and the number of observations (N) are reported in the table. Panel A provides summary statistics for the entire sample of study. Panel B summarizes the data for the treated loans whereas Panel C reports summary for control loans. All variables are winsorized at the 1% and 99% percentiles, and are defined in Appendix B.

| Statistic | Mean | St.D. | Min | Pctl(25) | Median | Pctl(75) | Max | N |
|--------------------------------------|--------|--------|-------|----------|--------|----------|--------|--------|
| Panel A: Full sample of Loans | | | | | | | | |
| <i>Price Terms</i> | | | | | | | | |
| AISD (bps) | 213.73 | 136.23 | 17.00 | 100.00 | 200.00 | 300.00 | 700.00 | 62,814 |
| Commitment Fee (bps) | 38.49 | 19.70 | 0.38 | 25.00 | 37.50 | 50.00 | 125.00 | 26,828 |
| Letter of Credit Fee (bps) | 178.30 | 97.38 | 12.50 | 100.00 | 162.50 | 250.00 | 450.00 | 21,466 |
| Upfront Fee (bps) | 54.88 | 48.22 | 2.50 | 20.00 | 40.00 | 75.00 | 225.00 | 15,450 |
| Utilization Fee (bps) | 12.38 | 7.93 | 2.50 | 7.50 | 12.50 | 12.50 | 55.00 | 4,983 |
| Cancellation Fee (bps) | 190.43 | 114.91 | 5.00 | 100.00 | 200.00 | 300.00 | 500.00 | 6,280 |
| <i>Non-price Terms</i> | | | | | | | | |
| Facility amount (\$B) | 0.26 | 0.43 | 0.001 | 0.02 | 0.10 | 0.28 | 2.50 | 71,079 |
| Maturity (month) | 48.63 | 27.65 | 4 | 24 | 52 | 60 | 120 | 71,079 |
| Syndicated (Y/N) | 0.90 | 0.30 | 0 | 1 | 1 | 1 | 1 | 67,679 |
| Seniority Level | 5.96 | 0.34 | 2 | 6 | 6 | 6 | 6 | 70,965 |
| The number of covenants | 3.72 | 3.35 | 0 | 0 | 3 | 6 | 13 | 71,079 |
| Panel B: Treated Loans | | | | | | | | |
| <i>Price Terms</i> | | | | | | | | |
| AISD (bps) | 164.59 | 125.76 | 17.00 | 62.50 | 137.50 | 250.00 | 700.00 | 10,327 |
| Commitment Fee (bps) | 36.27 | 19.29 | 4.00 | 20.00 | 37.50 | 50.00 | 125.00 | 3,501 |
| Letter of Credit Fee (bps) | 160.33 | 103.26 | 12.50 | 70.00 | 145.00 | 237.50 | 450.00 | 3,137 |
| Upfront Fee (bps) | 42.35 | 41.22 | 2.50 | 12.50 | 25.00 | 60.00 | 225.00 | 2,151 |
| Utilization Fee (bps) | 12.93 | 6.95 | 5.00 | 10.00 | 12.50 | 12.50 | 50.00 | 1,502 |
| Cancellation Fee (bps) | 156.32 | 90.77 | 25.00 | 100.00 | 100.00 | 200.00 | 500.00 | 521 |
| <i>Non-price Terms</i> | | | | | | | | |
| Facility amount (\$B) | 0.47 | 0.55 | 0.001 | 0.12 | 0.28 | 0.60 | 2.50 | 11,679 |
| Maturity (month) | 48.61 | 28.58 | 4 | 18 | 59 | 60 | 120 | 11,679 |
| Syndicated (Y/N) | 0.99 | 0.11 | 0 | 1 | 1 | 1 | 1 | 11,165 |
| Seniority Level | 5.97 | 0.31 | 3 | 6 | 6 | 6 | 6 | 11,667 |
| The number of covenants | 2.97 | 3.22 | 0 | 0 | 2 | 5 | 12 | 11,679 |
| Panel C: Control Loans | | | | | | | | |
| <i>Price Terms</i> | | | | | | | | |
| AISD (bps) | 223.40 | 136.12 | 17.00 | 125.00 | 225.00 | 300.00 | 700.00 | 52,487 |
| Commitment Fee (bps) | 38.83 | 19.74 | 0.38 | 25.00 | 37.50 | 50.00 | 125.00 | 23,327 |
| Letter of Credit Fee (bps) | 181.37 | 96.00 | 12.50 | 100.00 | 175.00 | 250.00 | 450.00 | 18,329 |
| Upfront Fee (bps) | 56.91 | 48.96 | 2.50 | 20.42 | 50.00 | 75.00 | 225.00 | 13,299 |
| Utilization Fee (bps) | 12.14 | 8.31 | 2.50 | 7.50 | 10.00 | 12.50 | 55.00 | 3,481 |
| Cancellation Fee (bps) | 193.51 | 116.36 | 5.00 | 100.00 | 200.00 | 300.00 | 500.00 | 5,759 |
| <i>Non-price Terms</i> | | | | | | | | |
| Facility amount (\$B) | 0.22 | 0.39 | 0.001 | 0.02 | 0.08 | 0.22 | 2.50 | 59,400 |
| Maturity (month) | 48.63 | 27.46 | 4 | 25 | 49 | 60 | 120 | 59,400 |
| Syndicated (Y/N) | 0.88 | 0.33 | 0 | 1 | 1 | 1 | 1 | 56,514 |
| Seniority Level | 5.96 | 0.35 | 2 | 6 | 6 | 6 | 6 | 59,298 |
| The number of covenants | 3.87 | 3.35 | 0 | 0 | 3 | 6 | 13 | 59,400 |

Table 2 Summary Statistics of Borrower Characteristics

This table presents summary statistics on the main borrower characteristics. The sample of the study consists of companies incorporated in Delaware and covered by both quarterly Compustat and LPC DealScan between January 1997 and December 2005. I remove (1) firms in financial and utility sectors and (2) firms with zero or missing values for total assets. The treatment sample includes firms using asset-backed securitization for financing purposes, as reported in SEC EDGAR 10-k filings. The control sample is the remainder of the Compustat universe valid for the required data. Panel A reports summary statistics for the entire sample, Panel B reports summary statistics for the treated sample, and Panel C reports the statistics for the control sample. The definition of all variables is summarized in Appendix B. Asset-scaled variables in the table are defined using lagged assets from the end of the previous quarter. All variables are winsorized at the 1% and 99% percentiles.

| Statistic | Mean | St.D. | Min | Pctl(25) | Median | Pctl(75) | Max | N |
|--------------------------------------|-----------|-----------|-------|----------|----------|-----------|------------|--------|
| Panel A: Full sample of Firms | | | | | | | | |
| Book Assets (\$M) | 3,195.62 | 7,406.17 | 7.15 | 152.85 | 588.08 | 2,120.30 | 47,882.38 | 71,079 |
| Market capitalization (\$M) | 5,935.48 | 15,099.27 | 14.34 | 241.10 | 953.33 | 3,637.05 | 104,612.50 | 61,959 |
| Total Debt (\$M) | 1,037.34 | 2,382.49 | 0.00 | 27.00 | 194.06 | 735.70 | 14,751.40 | 67,857 |
| Cashflow (\$M) | 186.87 | 549.29 | 0.00 | 3.86 | 19.58 | 95.93 | 3,913.82 | 71,008 |
| Accounts receivable (\$M) | 395.23 | 1,054.41 | 0.00 | 17.56 | 65.07 | 261.02 | 7,547.50 | 70,111 |
| Market-to-book | 1.98 | 1.51 | 0.63 | 1.15 | 1.53 | 2.18 | 10.76 | 61,627 |
| Leverage | 0.37 | 0.29 | 0.00 | 0.17 | 0.33 | 0.52 | 1.51 | 65,007 |
| Profitability | 0.03 | 0.04 | -0.13 | 0.02 | 0.03 | 0.05 | 0.14 | 62,307 |
| Tangibility | 0.33 | 0.25 | 0.01 | 0.13 | 0.27 | 0.48 | 1.01 | 67,729 |
| Cashflow/Assets | 0.01 | 0.04 | -0.22 | 0.01 | 0.02 | 0.03 | 0.11 | 62,343 |
| Accounts receivable/Assets | 0.17 | 0.13 | 0.00 | 0.07 | 0.14 | 0.23 | 0.64 | 67,176 |
| Panel B: Treated Firms | | | | | | | | |
| Book Assets (\$M) | 8,181.92 | 11,638.20 | 7.15 | 1,142.58 | 2,898.16 | 9,988.00 | 47,882.38 | 11,679 |
| Market capitalization (\$M) | 14,408.91 | 23,600.02 | 56.75 | 1,748.31 | 4,737.76 | 15,445.00 | 104,612.50 | 10,461 |
| Total Debt (\$M) | 2,606.18 | 3,646.18 | 0.00 | 359.34 | 980.85 | 3,276.15 | 14,751.40 | 11,140 |
| Cashflow (\$M) | 441.06 | 882.47 | 0.00 | 20.41 | 83.91 | 351.70 | 3,913.82 | 11,677 |
| Accounts receivable (\$M) | 1,174.03 | 1,886.75 | 0.00 | 157.94 | 403.83 | 1,126.75 | 7,547.50 | 11,563 |
| Market-to-book | 1.66 | 0.98 | 0.63 | 1.12 | 1.38 | 1.86 | 10.76 | 10,439 |
| Leverage | 0.39 | 0.25 | 0.00 | 0.24 | 0.35 | 0.51 | 1.51 | 10,886 |
| Profitability | 0.03 | 0.02 | -0.13 | 0.02 | 0.03 | 0.04 | 0.14 | 10,218 |
| Tangibility | 0.33 | 0.20 | 0.01 | 0.17 | 0.29 | 0.46 | 1.01 | 11,371 |
| Cashflow/Assets | 0.02 | 0.03 | -0.22 | 0.01 | 0.02 | 0.03 | 0.11 | 10,221 |
| Accounts receivable/Assets | 0.18 | 0.12 | 0.00 | 0.09 | 0.15 | 0.22 | 0.64 | 11,299 |
| Panel C: Control Firms | | | | | | | | |
| Book Assets (\$M) | 2,215.24 | 5,758.22 | 7.15 | 119.44 | 404.82 | 1,404.20 | 47,882.38 | 59,400 |
| Market capitalization (\$M) | 4,214.24 | 11,984.32 | 14.34 | 184.04 | 676.00 | 2,318.33 | 104,612.50 | 51,498 |
| Total Debt (\$M) | 729.20 | 1,897.83 | 0.00 | 17.73 | 127.32 | 496.36 | 14,751.40 | 56,717 |
| Cashflow (\$M) | 136.84 | 438.90 | 0.00 | 3.01 | 14.60 | 67.60 | 3,913.82 | 59,331 |
| Accounts receivable (\$M) | 241.42 | 696.35 | 0.00 | 13.70 | 46.11 | 158.98 | 7,547.50 | 58,548 |
| Market-to-book | 2.04 | 1.59 | 0.63 | 1.16 | 1.57 | 2.26 | 10.76 | 51,188 |
| Leverage | 0.37 | 0.30 | 0.00 | 0.16 | 0.32 | 0.52 | 1.51 | 54,121 |
| Profitability | 0.03 | 0.04 | -0.13 | 0.02 | 0.03 | 0.05 | 0.14 | 52,089 |
| Tangibility | 0.33 | 0.25 | 0.01 | 0.12 | 0.26 | 0.48 | 1.01 | 56,358 |
| Cashflow/Assets | 0.01 | 0.05 | -0.22 | 0.01 | 0.02 | 0.03 | 0.11 | 52,122 |
| Accounts receivable/Assets | 0.17 | 0.13 | 0.00 | 0.07 | 0.14 | 0.23 | 0.64 | 55,877 |

Table 3 Propensity score matching

This table presents propensity score matching estimates, calculated from a probit regression that determines the probability of whether a firm uses a securitization program or not. Control variables in the regressions include firm size, market-to-book ratio, leverage, profitability, tangibility, cashflow to assets ratio, accounts receivable to assets ratio, as well as year and industry fixed effects. The estimated propensity scores are then used to match firms in the treatment group with firms in the control group. Panel A in the table reports the results from running the probit model on both the pre-matched sample (3553 SPV firms and 19043 non-SPV firms) and the matched sample (1848 SPV firms and 1848 non-SPV firms), where the dependent variable is a dummy which takes the value one if a firm initiates a securitization program and zero otherwise. Panel B reports summary statistics including mean, median, standard deviation as well as the results from t-tests for differences in means between SPV firms and the control group of non-SPV firms. Panel C reports the same statistics for the matched sample of treated and control firms. The definition of all variables are presented in Appendix B. The statistical significance levels at 1%, 5%, and 10% are indicated by ***, **, and *, respectively.

| Panel A: Probit Matching Regressions | | |
|---|---|-------------------|
| | <i>Dependent variable: Using a securitization program</i> | |
| | Pre-matched Sample | Matched Sample |
| | (1) | (2) |
| Firm Size | 0.613*** (0.012) | -0.011 (0.021) |
| Market-to-book | -0.068*** (0.014) | -0.006 (0.021) |
| Leverage | 0.500*** (0.068) | 0.081 (0.106) |
| Profitability | -0.273 (0.784) | 1.744 (1.235) |
| Tangibility | -0.922*** (0.107) | 0.086 (0.161) |
| Cashflow | -0.286 (0.627) | -0.261 (0.963) |
| Accounts receivable | 0.008 (0.170) | -0.173 (0.269) |
| Time FE | Yes | Yes |
| Industry FE | Yes | Yes |
| Treated Obs. | 3553 | 1848 |
| Untreated Obs. | 19043 | 1848 |

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Panel B: Difference in Pre-Matched Variables

| | SPV Firms | | | Non-SPV Firms | | | Diff. | p-value |
|---------------------|-----------|--------|-------|---------------|--------|-------|-----------|---------|
| | Mean | Median | St.D. | Mean | Median | St.D. | | |
| Firm size | 7.90 | 7.82 | 1.50 | 5.70 | 5.65 | 1.80 | 2.192*** | 2.2e-16 |
| Market-to-book | 1.81 | 1.49 | 1.20 | 2.19 | 1.61 | 1.84 | -0.381*** | 2.2e-16 |
| Leverage | 0.42 | 0.37 | 0.25 | 0.38 | 0.34 | 0.30 | 0.039*** | 2.2e-16 |
| Profitability | 0.04 | 0.03 | 0.03 | 0.03 | 0.03 | 0.04 | 0.005*** | 2.2e-16 |
| Tangibility | 0.35 | 0.30 | 0.21 | 0.34 | 0.27 | 0.26 | 0.006 | 0.09 |
| Cashflow | 0.02 | 0.02 | 0.03 | 0.01 | 0.02 | 0.05 | 0.007*** | 2.2e-16 |
| Accounts receivable | 0.19 | 0.15 | 0.13 | 0.18 | 0.16 | 0.14 | 0.00 | 0.95 |

Panel C: Difference in Matched Variables

| | SPV Firms | | | Non-SPV Firms | | | Diff. | p-value |
|---------------------|-----------|--------|-------|---------------|--------|-------|--------|---------|
| | Mean | Median | St.D. | Mean | Median | St.D. | | |
| Firm size | 7.49 | 7.38 | 1.33 | 7.49 | 7.49 | 1.56 | -0.008 | 0.87 |
| Market-to-book | 1.89 | 1.54 | 1.36 | 1.89 | 1.57 | 1.12 | 0.005 | 0.89 |
| Leverage | 0.37 | 0.34 | 0.24 | 0.37 | 0.32 | 0.26 | 0.002 | 0.78 |
| Profitability | 0.04 | 0.04 | 0.03 | 0.04 | 0.04 | 0.03 | 0.001 | 0.31 |
| Tangibility | 0.35 | 0.30 | 0.21 | 0.35 | 0.31 | 0.23 | -0.000 | 0.97 |
| Cashflow | 0.02 | 0.02 | 0.03 | 0.02 | 0.02 | 0.03 | 0.000 | 0.78 |
| Accounts receivable | 0.17 | 0.15 | 0.10 | 0.17 | 0.16 | 0.11 | -0.000 | 0.96 |

Table 4 Summary Statistics of the Matched Sample

This table reports summary statistics for the matched sample obtained from propensity score method, which is used in the main analysis of this paper. Panel A shows mean, standard deviation (St.D.), median, the number of observations (N) and univariate t-tests of differences in loan and borrower characteristics before and after the enactment of the AR statute, respectively. Panel B shows the same for the matched control group. All variables are defined in Appendix B. The significance levels at 1%, 5%, and 10% are indicated by ***, **, and *, respectively.

| Panel A: Treated Sample | | | | | | | | | |
|--------------------------------|--------------------|--------|--------|-------|-------------------|--------|--------|-------|-------------------|
| Statistic | Before 2001 | | | | After 2001 | | | | Difference |
| | Mean | St.D. | Median | N | Mean | St.D. | Median | N | Mean |
| AISD (bps) | 170.44 | 117.20 | 125.00 | 3,740 | 186.53 | 134.74 | 150.00 | 2,520 | 16.09*** |
| Commitment Fee (bps) | 3.37 | 0.59 | 3.62 | 1,221 | 3.50 | 0.57 | 3.62 | 889 | 0.13*** |
| Letter of Credit Fee (bps) | 4.75 | 0.85 | 5.01 | 947 | 4.94 | 0.71 | 5.01 | 924 | 0.19*** |
| Upfront Fee (bps) | 3.42 | 0.89 | 3.40 | 1,085 | 3.31 | 1.13 | 3.22 | 385 | -0.11 |
| Utilization Fee (bps) | 2.49 | 0.51 | 2.53 | 467 | 2.45 | 0.47 | 2.53 | 524 | -0.04 |
| Cancellation Fee (bps) | 5.21 | 0.83 | 5.70 | 83 | 4.95 | 0.52 | 5.15 | 168 | -0.26 |
| Facility amount (USD billion) | 0.43 | 0.50 | 0.25 | 4,255 | 0.45 | 0.50 | 0.28 | 2,768 | -0.02 |
| log (Maturity) | 3.55 | 0.86 | 3.89 | 4,255 | 3.59 | 0.73 | 3.87 | 2,768 | 0.04* |
| Number of Financial covenants | 1.26 | 1.43 | 1 | 4,255 | 1.55 | 1.41 | 2 | 2,768 | 0.29*** |
| Number of sweep covenants | 1.36 | 2.00 | 0 | 4,255 | 1.55 | 1.96 | 1 | 2,768 | 0.19*** |
| Investment covenants | 0.14 | 0.34 | 0 | 4,255 | 0.24 | 0.43 | 0 | 2,768 | 0.1*** |
| Leverage covenants | 0.14 | 0.34 | 0 | 4,255 | 0.12 | 0.32 | 0 | 2,768 | -0.02** |
| Profitability covenants | 0.38 | 0.49 | 0 | 4,255 | 0.47 | 0.50 | 0 | 2,768 | 0.09*** |
| Coverage covenants | 0.42 | 0.49 | 0 | 4,255 | 0.55 | 0.50 | 1 | 2,768 | 0.13*** |
| Liquidity covenants | 0.04 | 0.19 | 0 | 4,255 | 0.004 | 0.07 | 0 | 2,768 | -0.033*** |
| Excess cashflow sweep | 0.43 | 0.50 | 0.00 | 1,341 | 0.88 | 0.33 | 1.00 | 456 | 0.45*** |
| Asset sales sweep | 0.75 | 0.43 | 1.00 | 1,443 | 1.00 | 0.07 | 1.00 | 850 | 0.25*** |
| Debt Issuance sweep | 0.63 | 0.48 | 1.00 | 1,419 | 0.97 | 0.16 | 1.00 | 607 | 0.34*** |
| Equity Issuance | 0.53 | 0.50 | 1.00 | 1,393 | 0.92 | 0.27 | 1.00 | 523 | 0.39*** |
| Dividend restrictions | 0.80 | 0.40 | 1.00 | 2,325 | 0.81 | 0.39 | 1.00 | 1,804 | 0.01 |

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| Statistic | Before 2001 | | | | After 2001 | | | | Difference |
|-------------------------------|-------------|--------|--------|-------|------------|--------|--------|-------|------------|
| | Mean | St.D. | Median | N | Mean | St.D. | Median | N | Mean |
| AISD (bps) | 187.38 | 122.50 | 175.00 | 6,939 | 199.89 | 157.01 | 175.00 | 3,563 | 12.50*** |
| Commitment Fee (bps) | 3.54 | 0.50 | 3.62 | 2,728 | 3.57 | 0.57 | 3.62 | 1,281 | 0.03 |
| Letter of Credit Fee (bps) | 4.98 | 0.70 | 5.16 | 2,053 | 5.00 | 0.78 | 5.16 | 1,291 | 0.02 |
| Upfront Fee (bps) | 3.50 | 0.95 | 3.62 | 1,991 | 3.69 | 1.02 | 3.91 | 494 | 0.19*** |
| Utilization Fee (bps) | 2.36 | 0.48 | 2.30 | 550 | 2.32 | 0.45 | 2.53 | 702 | -1.57*** |
| Cancellation Fee (bps) | 4.92 | 0.78 | 5.01 | 526 | 5.08 | 0.72 | 5.30 | 330 | 0.16*** |
| Facility amount (USD billion) | 0.29 | 0.45 | 0.15 | 8,158 | 0.41 | 0.52 | 0.20 | 3,892 | 0.12*** |
| log (Maturity) | 3.70 | 0.81 | 4.09 | 8,158 | 3.55 | 0.74 | 3.87 | 3,892 | -0.15*** |
| Number of Financial Covenants | 1.61 | 1.64 | 2 | 8,158 | 1.56 | 1.54 | 1 | 3,892 | -0.05* |
| Number of Sweep Covenants | 1.79 | 2.12 | 1 | 8,158 | 1.85 | 2.18 | 1 | 3,892 | 0.06 |
| Investment covenants | 0.16 | 0.36 | 0 | 8,158 | 0.23 | 0.42 | 0 | 3,892 | 0.07*** |
| Leverage covenants | 0.16 | 0.36 | 0 | 8,158 | 0.13 | 0.33 | 0 | 3,892 | -0.03*** |
| Profitability covenants | 0.42 | 0.49 | 0 | 8,158 | 0.44 | 0.50 | 0 | 3,892 | 0.02** |
| Coverage covenants | 0.49 | 0.50 | 0 | 8,158 | 0.50 | 0.50 | 0 | 3,892 | 0.01 |
| Liquidity covenants | 0.08 | 0.28 | 0 | 8,158 | 0.03 | 0.17 | 0 | 3,892 | -0.05*** |
| Excess cashflow sweep | 0.51 | 0.50 | 1.00 | 3,301 | 0.78 | 0.42 | 1.00 | 868 | 0.27*** |
| Asset sales sweep | 0.75 | 0.43 | 1.00 | 3,598 | 0.99 | 0.09 | 1.00 | 1,352 | 0.24*** |
| Debt Issuance sweep | 0.60 | 0.49 | 1.00 | 3,450 | 0.93 | 0.25 | 1.00 | 1,113 | 0.33*** |
| Equity Issuance sweep | 0.56 | 0.50 | 1.00 | 3,386 | 0.92 | 0.27 | 1.00 | 1,122 | 0.36*** |
| Dividend restrictions | 0.87 | 0.34 | 1.00 | 5,365 | 0.79 | 0.41 | 1.00 | 2,732 | -0.08*** |

Note:

*p<0.1; **p<0.05; ***p<0.01

Table 5 Pearson Correlation Matrix

This table shows the Pearson correlation matrix for various loan and borrower variables used in the analysis. Loan pricing terms include all-in-spread-drawn (AISD), Commitment Fee (Com), Letter of Credit Fee (Lc), Upfront Fee (Upfr), Utilization Fee (Util), and Cancellation Fee (Canc). Loan non-pricing terms consist of facility amount (AMT), loan maturity (Mat), the number of financial covenants (FinC), and the number of Sweep (Swp). Additionally, key borrower characteristics are reported namely firm size (Firm size), Market-to-book (M/B), leverage (Lev), profitability (Prof), tangibility (Tan), cashflow (CF) and Accounts receivable (AR). Definition of all the variables are reported in Appendix B.

| | AISD | Com | Lc | Upfr | Util | Canc | AMT | Mat | FinC | Swp | Firm size | M/B | Lev | Prof | Tan | CF | AR |
|-----------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|-----------|--------|--------|-------|--------|-------|----|
| AISD | 1 | | | | | | | | | | | | | | | | |
| Com | 0.698 | 1 | | | | | | | | | | | | | | | |
| Lc | 0.808 | 0.737 | 1 | | | | | | | | | | | | | | |
| Upfr | 0.554 | 0.504 | 0.495 | 1 | | | | | | | | | | | | | |
| Util | 0.524 | 0.281 | 0.396 | 0.525 | 1 | | | | | | | | | | | | |
| Canc | 0.309 | 0.127 | 0.089 | 0.238 | | 1 | | | | | | | | | | | |
| AMT | -0.367 | -0.307 | -0.389 | -0.220 | -0.304 | -0.055 | 1 | | | | | | | | | | |
| Mat | 0.206 | 0.126 | -0.086 | 0.057 | -0.046 | 0.176 | -0.157 | 1 | | | | | | | | | |
| FinC | 0.289 | 0.317 | 0.355 | 0.118 | 0.266 | 0.170 | -0.168 | 0.196 | 1 | | | | | | | | |
| Swp | 0.422 | 0.442 | 0.520 | 0.195 | 0.189 | 0.113 | -0.184 | 0.240 | 0.700 | 1 | | | | | | | |
| Firm size | -0.373 | -0.230 | -0.287 | -0.188 | -0.262 | 0.016 | 0.595 | -0.212 | -0.311 | -0.292 | 1 | | | | | | |
| M/B | -0.184 | -0.191 | -0.155 | -0.055 | -0.125 | 0.056 | 0.055 | -0.037 | -0.019 | -0.059 | 0.006 | 1 | | | | | |
| Lev | 0.350 | 0.317 | 0.258 | 0.151 | 0.058 | 0.179 | -0.094 | 0.199 | 0.154 | 0.224 | -0.080 | 0.042 | 1 | | | | |
| Prof | -0.262 | -0.215 | -0.199 | -0.193 | -0.111 | -0.095 | 0.055 | 0.052 | 0.066 | 0.023 | -0.041 | 0.311 | -0.010 | 1 | | | |
| Tan | -0.037 | 0.023 | -0.054 | -0.047 | 0.115 | 0.268 | 0.078 | 0.046 | -0.090 | -0.089 | 0.175 | -0.052 | 0.219 | 0.117 | 1 | | |
| CF | -0.298 | -0.221 | -0.208 | -0.211 | -0.087 | -0.101 | 0.079 | 0.042 | 0.011 | -0.038 | 0.034 | 0.148 | -0.184 | 0.698 | 0.105 | 1 | |
| AR | -0.043 | -0.102 | -0.012 | -0.093 | -0.084 | -0.311 | -0.122 | -0.080 | 0.025 | -0.002 | -0.260 | 0.132 | -0.135 | 0.142 | -0.368 | 0.077 | 1 |

Table 6 Loan spreads and creditor rights

This table presents the relation between loan spreads and creditor rights. The dependent variable is the logarithm of all-in-drawn loan spread (Loan spread). The main variable of interest is the interaction term between Post and treated dummy, which is equal to one for loans granted to SPV originator companies after the passage of the anti-recharacterization law and zero otherwise. The sample is based on loans in the U.S. loan market from 1997 to 2005. All variables are winsorized at the 1% and 99% percentiles, and are summarized in Appendix B. Standard errors are reported in parentheses. Significance at the 1%, 5% and 10% level is denoted by ***, ** and *, respectively.

| | <i>Dependent variable: log(AISD)</i> | | | | | | |
|------------------------------|--------------------------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|
| | (1) | (2) | (3) | (4) | (5) | (6) | (7) |
| <i>Post</i> × <i>Treated</i> | 0.343*** (0.028) | 0.183*** (0.024) | 0.116*** (0.022) | 0.147*** (0.021) | 0.146*** (0.021) | 0.152*** (0.019) | 0.153*** (0.019) |
| Treated | -0.288*** (0.019) | -0.061*** (0.016) | -0.003 (0.015) | 0.044*** (0.015) | 0.045*** (0.015) | 0.037*** (0.014) | 0.026* (0.014) |
| Facility amount | | -0.306*** (0.004) | -0.123*** (0.006) | -0.106*** (0.005) | -0.106*** (0.005) | -0.082*** (0.005) | -0.098*** (0.005) |
| Maturity | | 0.325*** (0.009) | 0.211*** (0.008) | 0.184*** (0.008) | 0.184*** (0.008) | 0.016* (0.009) | 0.016* (0.009) |
| Firm Size | | | -0.191*** (0.005) | -0.230*** (0.006) | -0.229*** (0.006) | -0.210*** (0.006) | -0.178*** (0.006) |
| Market-to-book | | | -0.073*** (0.006) | -0.067*** (0.006) | -0.068*** (0.006) | -0.065*** (0.005) | -0.058*** (0.005) |
| Leverage | | | 0.930*** (0.021) | 0.807*** (0.023) | 0.806*** (0.023) | 0.707*** (0.022) | 0.699*** (0.022) |
| Profitability | | | -5.571*** (0.289) | -4.132*** (0.277) | -4.121*** (0.277) | -3.704*** (0.262) | -3.915*** (0.263) |
| Tangibility | | | -0.034 (0.025) | -0.227*** (0.038) | -0.230*** (0.038) | -0.178*** (0.036) | -0.188*** (0.035) |
| Cashflow | | | -1.417*** (0.215) | -1.264*** (0.206) | -1.260*** (0.206) | -1.028*** (0.195) | -0.985*** (0.196) |
| Accounts receivable | | | -0.419*** (0.056) | -0.501*** (0.059) | -0.491*** (0.059) | -0.386*** (0.056) | -0.288*** (0.054) |
| Credit spread | | | | | -0.602*** (0.111) | -0.594*** (0.105) | -0.501*** (0.104) |
| Term spread | | | | | 0.007 (0.023) | -0.013 (0.021) | -0.022 (0.021) |
| Quarter FE | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| Industry FE | No | No | No | Yes | Yes | Yes | Yes |
| Loan type FE | No | No | No | No | No | Yes | Yes |
| Loan purpose FE | No | No | No | No | No | No | Yes |
| Observations | 16,762 | 16,762 | 14,635 | 14,635 | 14,635 | 14,635 | 14,635 |
| R ² | 0.051 | 0.347 | 0.518 | 0.608 | 0.608 | 0.653 | 0.669 |
| Adjusted R ² | 0.049 | 0.345 | 0.516 | 0.604 | 0.604 | 0.650 | 0.666 |

Note:

*p<0.1; **p<0.05; ***p<0.01

Table 7 Frequency of Loan Fees

This table reports the frequency of inclusion of several fee types for credit lines and term loans in my sample. The first column describes the type of the fees available in Dealscan. Column 2 reports the frequency of loans including a particular type of fee (as specified in column 2) whereas column 3 reports the percentage of such loan contracts in the whole sample. The last two columns report mean (in bps) and median (in bps) of fee types in my sample. All variables are summarized in Appendix B.

| Loan Fee Type | Frequency (1) | Percentage of contracts (2) | Mean (3) | Median (4) |
|------------------------------|------------------|--------------------------------|-------------|---------------|
| Panel A. Credit lines | | | | |
| Commitment Fee | 4974 | 58% | 39.34 | 37.50 |
| Letter of Credit Fee | 4788 | 56% | 176.38 | 162.50 |
| Annual Fee | 2434 | 29% | 18.66 | 15.00 |
| Upfront Fee | 1887 | 22% | 49.38 | 37.50 |
| Utilization Fee | 1063 | 12% | 12.37 | 12.50 |
| Cancellation Fee | 475 | 5.6% | 162.26 | 133.33 |
| Panel B: Term loans | | | | |
| Upfront Fee | 1500 | 28% | 56.82 | 50.00 |
| Cancellation Fee | 589 | 11% | 201.0 | 200.0 |

Table 8 Loan Fees and creditor rights

This table presents the relation between most common types of loan fees and creditor rights. Columns (1)-(4) report the results for credit lines whereas column (5) shows the result for term loans. The main independent variable is the interaction term, which is an indicator variable equals to one if the loan is borrowed by SPV originator companies after the passage of the anti-recharacterization law and zero otherwise. All variables are winsorized at the 1% and 99% percentiles, and are summarized in Appendix B. Standard errors are reported in parentheses. Significance at the 1%, 5% and 10% level is denoted by ***, ** and *, respectively.

| | <i>Credit Lines</i> | | | | <i>Term Loans</i> |
|------------------------------|----------------------|----------------------|----------------------|----------------------|----------------------|
| | Commitment Fee | Annual Fee | LC Fee | Upfront Fee | Upfront Fee |
| | (1) | (2) | (3) | (4) | (5) |
| <i>Post</i> × <i>Treated</i> | 0.092*** (0.027) | 0.136*** (0.038) | 0.084** (0.035) | -0.136 (0.100) | -0.055 (0.185) |
| <i>Treated</i> | 0.010 (0.020) | -0.012 (0.031) | -0.009 (0.030) | 0.076 (0.059) | 0.075 (0.080) |
| Facility amount | -0.038*** (0.007) | 0.024* (0.014) | -0.124*** (0.014) | -0.034 (0.024) | -0.063*** (0.023) |
| Maturity | 0.001 (0.017) | -0.360*** (0.058) | -0.075*** (0.028) | 0.148** (0.066) | -0.047 (0.042) |
| Firm Size | -0.070*** (0.008) | -0.187*** (0.013) | -0.107*** (0.014) | -0.142*** (0.027) | -0.049 (0.030) |
| Market-to-book | -0.051*** (0.010) | -0.152*** (0.021) | -0.085*** (0.014) | -0.055*** (0.019) | -0.043** (0.017) |
| Leverage | 0.443*** (0.031) | 0.845*** (0.089) | 0.729*** (0.042) | 0.661*** (0.101) | 0.046 (0.104) |
| Profitability | -2.282*** (0.324) | -1.117 (0.749) | -3.087*** (0.516) | -5.008*** (0.973) | 0.114 (1.266) |
| Tangibility | -0.059 (0.044) | -0.311*** (0.096) | -0.179*** (0.064) | -0.663*** (0.145) | -0.352** (0.150) |
| Cashflow | -0.372* (0.198) | 0.658 (0.631) | 0.361 (0.357) | -1.533** (0.719) | -3.014*** (0.930) |
| Accounts receivable | -0.152* (0.079) | -0.297 (0.184) | -0.115 (0.102) | -1.083*** (0.240) | 0.077 (0.295) |
| Credit spread | -0.623*** (0.148) | 0.308 (0.225) | -0.531** (0.208) | 0.434 (0.488) | 1.404** (0.633) |
| Term spread | 0.117*** | 0.010 | -0.035 | -0.202** | -0.625*** |
| Quarter FE | Yes | Yes | Yes | Yes | Yes |
| Industry FE | Yes | Yes | Yes | Yes | Yes |
| Loan type FE | Yes | Yes | Yes | Yes | Yes |
| Loan purpose FE | Yes | Yes | Yes | Yes | Yes |
| Observations | 4,362 | 2,184 | 4,240 | 1,666 | 1,317 |
| R ² | 0.448 | 0.651 | 0.517 | 0.558 | 0.645 |
| Adjusted R ² | 0.428 | 0.626 | 0.499 | 0.517 | 0.607 |

Note:

*p<0.1; **p<0.05; ***p<0.01

Table 9 Covenant restrictiveness and creditor rights

This table reports the effect of creditor rights on loan covenants. I run Poisson and OLS regressions with the number of covenants as the dependent variable. The main variable of interest is the interaction term between Post and treated dummy, which is equal to one for SPV originator companies after the passage of the anti-recharacterization law and zero otherwise. All variables are winsorized at the 1% and 99% percentiles, and are summarized in Appendix B. Standard errors are clustered at the firm level and reported in parentheses. Significance at the 1%, 5% and 10% level is denoted by ***, ** and *, respectively.

| Panel A: The Number of Financial Covenants | | | | | | |
|---|----------------------|----------------------|---------------------|----------------------|----------------------|---------------------|
| | <i>Poisson</i> | | | <i>OLS</i> | | |
| | (1) | (2) | (3) | (4) | (5) | (6) |
| <i>Post × Treated</i> | 0.300*** (0.031) | 0.255*** (0.031) | 0.244*** (0.029) | 0.434*** (0.045) | 0.343*** (0.043) | 0.296*** (0.041) |
| Treated | -0.272*** (0.022) | -0.063*** (0.023) | -0.034 (0.022) | -0.392*** (0.030) | -0.085*** (0.030) | -0.027 (0.028) |
| Quarter FE | Yes | Yes | Yes | Yes | Yes | Yes |
| Controls | No | Yes | Yes | No | Yes | Yes |
| Industry FE | No | No | Yes | No | No | Yes |
| Loan type FE | No | No | Yes | No | No | Yes |
| Loan purpose FE | No | No | Yes | No | No | Yes |
| Observations | 19,073 | 16,603 | 16,603 | 19,073 | 16,603 | 16,603 |
| R ² | 0.623 | 0.583 | 0.683 | 0.402 | 0.548 | 0.627 |

| Panel B: The Number of Sweep Covenants | | | | | | |
|---|----------------------|-------------------|--------------------|----------------------|-------------------|-------------------|
| | <i>Poisson</i> | | | <i>OLS</i> | | |
| | (1) | (2) | (3) | (4) | (5) | (6) |
| <i>Post × Treated</i> | 0.167*** (0.039) | 0.075* (0.040) | 0.092** (0.036) | 0.264*** (0.061) | 0.098* (0.059) | 0.074 (0.054) |
| Treated | -0.280*** (0.027) | -0.008 (0.029) | -0.019 (0.026) | -0.446*** (0.040) | -0.040 (0.041) | -0.038 (0.037) |
| Quarter FE | Yes | Yes | Yes | Yes | Yes | Yes |
| Controls | No | Yes | Yes | No | Yes | Yes |
| Industry FE | No | No | Yes | No | No | Yes |
| Loan type FE | No | No | Yes | No | No | Yes |
| Loan purpose FE | No | No | Yes | No | No | Yes |
| Observations | 19,073 | 16,603 | 16,603 | 19,073 | 16,603 | 16,603 |
| R ² | 0.112 | 0.716 | 0.829 | 0.425 | 0.598 | 0.684 |

Note:

*p<0.1; **p<0.05; ***p<0.01

Table 10 Covenant Types and creditor rights

This table reports the effect of creditor rights on the likelihood of the inclusion of loan covenants. I run probit regressions with a dummy variable equal to one if a loan contract contains a specific type of covenant as the dependent variable. The main variable of interest is the interaction term between Post and treated dummy, which is equal to one for SPV originator companies after the passage of the anti-recharacterization law and zero otherwise. All variables are winsorized at the 1% and 99% percentiles, and are summarized in Appendix B. Standard errors are reported in parentheses. Significance at the 1%, 5% and 10% level is denoted by ***, ** and *, respectively.

| Panel A: The Type of Financial Covenant | | | | | |
|--|---------------------|----------------------|----------------------|----------------------|---------------------|
| | Coverage (1) | Leverage (2) | Networth (3) | Profitability (4) | Investment (5) |
| <i>Post × Treated</i> | 0.423*** (0.048) | 0.304*** (0.061) | 0.175*** (0.053) | 0.141*** (0.047) | 0.071 (0.066) |
| Treated | 0.035 (0.033) | -0.220*** (0.044) | -0.208*** (0.036) | 0.153*** (0.033) | 0.249*** (0.052) |
| Quarter FE | Yes | Yes | Yes | Yes | Yes |
| Controls | Yes | Yes | Yes | Yes | Yes |
| Industry FE | Yes | Yes | No | No | Yes |
| Loan type FE | Yes | Yes | Yes | Yes | Yes |
| Loan purpose FE | Yes | Yes | Yes | Yes | Yes |
| Observations | 16,603 | 16,603 | 16,603 | 16,603 | 16,603 |
| R ² | 0.55 | 0.43 | 0.39 | 0.51 | 0.59 |
| Panel B: The Type of Sweep Covenant | | | | | |
| | ExcessCash (1) | Dividend (2) | AssetSales (3) | Debtissue (4) | Equityissue (5) |
| <i>Post × Treated</i> | 0.560*** (0.165) | 0.443*** (0.069) | 0.674* (0.393) | 0.454* (0.252) | 0.122 (0.224) |
| Treated | 0.055 (0.069) | -0.044 (0.051) | 0.281** (0.112) | 0.502*** (0.099) | 0.356*** (0.105) |
| Quarter FE | Yes | Yes | Yes | Yes | Yes |
| Controls | Yes | Yes | Yes | Yes | Yes |
| Industry FE | Yes | Yes | No | No | Yes |
| Loan type FE | Yes | Yes | Yes | Yes | Yes |
| Loan purpose FE | Yes | Yes | Yes | Yes | Yes |
| Observations | 5,004 | 10,614 | 6,123 | 5,528 | 5,407 |
| R ² | 0.63 | 0.31 | 0.56 | 0.63 | 0.64 |

Note:

*p<0.1; **p<0.05; ***p<0.01

Table 11 Non-price loan contract terms and creditor rights

This table presents the relation between bank loan nonprice terms and creditor rights. The dependent variable in column 1 to 4 is loan size, which is measured by the log of facility amount and the dependent variable in column 5 to 8 is the maturity of a loan facility. The main independent variables is the interaction term between Post and Treated dummy, which is an indicator variable that equals one if the loan is granted to a SPV originator company after the passage of the anti-recharacterization law and zero otherwise. All variables are winsorized at the 1% and 99% percentiles, and are summarized in Appendix B. Standard errors are reported in parentheses. Significance at the 1%, 5% and 10% level is denoted by ***, ** and *, respectively.

| | <i>Dependent variable:</i> | | | | | | | |
|------------------------------|----------------------------|----------------------|----------------------|----------------------|----------------------|-------------------|--------------------|------------------|
| | Loan size | | | | Loan Maturity | | | |
| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) |
| <i>Post</i> × <i>Treated</i> | -0.409*** (0.041) | -0.352*** (0.039) | -0.315*** (0.036) | -0.096*** (0.031) | 3.498*** (0.816) | 1.143* (0.663) | 0.214 (0.651) | 0.684 (0.668) |
| Treated | 0.659*** (0.026) | 0.584*** (0.025) | 0.640*** (0.024) | 0.008 (0.021) | -3.007*** (0.627) | 0.263 (0.484) | 1.179** (0.470) | 0.454 (0.503) |
| Quarter FE | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| Loan type FE | No | Yes | Yes | Yes | No | Yes | Yes | Yes |
| Industry FE | No | No | Yes | Yes | No | No | Yes | Yes |
| Controls | No | No | No | Yes | No | No | No | Yes |
| Loan purpose FE | No | No | No | Yes | No | No | No | Yes |
| Observations | 19,073 | 19,073 | 19,073 | 16,603 | 19,073 | 19,073 | 19,073 | 16,603 |
| R ² | 0.072 | 0.151 | 0.322 | 0.587 | 0.129 | 0.448 | 0.497 | 0.533 |
| Adjusted R ² | 0.070 | 0.149 | 0.317 | 0.583 | 0.128 | 0.447 | 0.493 | 0.528 |

Note:

*p<0.1; **p<0.05; ***p<0.01

Table 12 Creditor Rights and Firm Policies

This table shows the effect of strengthening SPV creditor rights on firm policies. Panel A reports the impact of the AR statute on financing policies whereas Panel B shows the effect on investment and payout policy. Panel C presents the effect of the legal change on firms operational performance. In this table, I only report the interaction term of interest due to space limit. All variables are winsorized at the 1% and 99% percentiles, and are summarized in Appendix B. Standard errors are reported in parentheses. Significance at the 1%, 5% and 10% level is denoted by ***, ** and *, respectively.

| Panel A: Financing Policy | | | | | | |
|--|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|
| | Log(Debt) | | Log(Assets) | | Debt/Assets | |
| | (1) | (2) | (3) | (4) | (5) | (6) |
| <i>Post × Treated</i> | 0.029 (0.025) | -0.017 (0.022) | 0.039*** (0.013) | 0.062*** (0.012) | -0.009* (0.005) | -0.012** (0.005) |
| Panel B: Liquidity Management and Payout Policy | | | | | | |
| | Log(Cash) | | Cash ratio | | Dividend | |
| | (1) | (2) | (3) | (4) | (5) | (6) |
| <i>Post × Treated</i> | 0.240*** (0.028) | 0.211*** (0.028) | 0.010*** (0.003) | 0.005** (0.003) | -0.045*** (0.008) | -0.314*** (0.081) |
| Panel C: Investment Policies | | | | | | |
| | Capex/Assets | | Log(Acquisition) | | Acquisition/Assets | |
| | (1) | (2) | (3) | (4) | (5) | (6) |
| <i>Post × Treated</i> | -0.00001 (0.001) | -0.0002 (0.001) | -0.275*** (0.086) | -0.252*** (0.087) | -0.012* (0.006) | -0.009*** (0.003) |
| Panel D: Operational Performance | | | | | | |
| | Log(OIBDP) | | OIBDP/Assets | | Log(NI) | |
| | (1) | (2) | (3) | (4) | (5) | (6) |
| <i>Post × Treated</i> | -0.130*** (0.032) | -0.087*** (0.018) | -0.002*** (0.001) | -0.002** (0.001) | -0.130*** (0.032) | -0.116*** (0.031) |
| Quarter FE | Yes | Yes | Yes | Yes | Yes | Yes |
| Firm FE | Yes | Yes | Yes | Yes | Yes | Yes |
| Industry FE | Yes | Yes | Yes | Yes | Yes | Yes |
| Controls | No | Yes | No | Yes | No | Yes |

Note:

*p<0.1; **p<0.05; ***p<0.01

Table 13 Cross-sectional effects of creditor rights on loan spread

This table shows the heterogenous impact of stronger SPV creditor rights on the loan spread of the parent company. Columns (1) and (2) use firm size to divide companies in to two subsamples and examine the effect of the AR statute across small and large firms. Columns (3) and (4) use Z-score to classify firms in to low and high Z-score whereas Columns (5) and (6) use the ratio of account receivable to assets to form the sub-samples. The main variable of interest is the interaction term, which takes the value one if the loan is granted to SPV originator company after the passage of the anti-recharacterization law and zero otherwise. All variables are winsorized at the 1% and 99% percentiles, and are summarized in Appendix B. Standard errors are reported in parentheses. Significance at the 1%, 5% and 10% level is denoted by ***, ** and *, respectively.

| | <i>Dependent variable: Log(AISD)</i> | | | | | |
|------------------------------|--------------------------------------|---------------------|---------------------|---------------------|----------------------------|---------------------|
| | Size | | Z-score | | Accounts receivable | |
| | Small | Large | Low | High | Low | High |
| <i>Post</i> × <i>Treated</i> | 0.193*** (0.026) | 0.117*** (0.027) | 0.182*** (0.028) | 0.142*** (0.026) | 0.118*** (0.026) | 0.169*** (0.023) |
| <i>Treated</i> | -0.055** (0.022) | 0.026 (0.021) | 0.023 (0.021) | 0.016 (0.021) | 0.080*** (0.023) | 0.012 (0.019) |
| Quarter FE | Yes | Yes | Yes | Yes | Yes | Yes |
| Loan type FE | Yes | Yes | Yes | Yes | Yes | Yes |
| Industry FE | Yes | Yes | Yes | Yes | Yes | Yes |
| Controls | Yes | Yes | Yes | Yes | Yes | Yes |
| Loan purpose FE | Yes | Yes | Yes | Yes | Yes | Yes |
| Observations | 6,890 | 7,006 | 7,246 | 7,444 | 6,752 | 8,939 |
| R ² | 0.602 | 0.707 | 0.644 | 0.721 | 0.732 | 0.744 |
| Adjusted R ² | 0.594 | 0.702 | 0.637 | 0.715 | 0.726 | 0.738 |

Note:

*p<0.1; **p<0.05; ***p<0.01

Table 14 Dynamic estimation of the effect of creditor rights

This table shows the dynamic estimates of the effect of creditor rights. Column (1) reports the estimates on loan spread whereas column (2) reports the same for commitment fee. Columns (3) and (4) show the estimates for letter of credit fee and annual fee, respectively. The interaction explanatory variables cover the sample of treated firms two years before and two years after the law change. For example, $treated \times 1999$ is a dummy variable equal to one for SPV originator firms in 1999. All variables are winsorized at the 1% and 99% percentiles, and are summarized in Appendix B. Standard errors are reported in parentheses. Significance at the 1%, 5% and 10% level is denoted by ***, ** and *, respectively.

| | <i>Dependent variable</i> | | | |
|-------------------------|---------------------------|-----------------------|---------------------|----------------------|
| | Log(AISD) (1) | Commitment Fee (2) | LC Fee (3) | Annual Fee (4) |
| $Treated \times 1999$ | -0.019 (0.030) | 0.005 (0.040) | 0.114 (0.071) | -0.183*** (0.055) |
| $Treated \times 2000$ | -0.002 (0.030) | 0.062 (0.039) | 0.117** (0.059) | -0.031 (0.049) |
| $Treated \times Q12001$ | 0.145** (0.057) | -0.103 (0.074) | 0.216*** (0.081) | 0.027 (0.080) |
| $Treated \times Q22001$ | 0.137*** (0.039) | 0.249*** (0.064) | 0.153* (0.086) | 0.171*** (0.054) |
| $Treated \times Q32001$ | 0.313*** (0.058) | 0.391*** (0.070) | 0.644*** (0.125) | 0.183** (0.079) |
| $Treated \times Q42001$ | 0.138** (0.063) | 0.335*** (0.078) | -0.143 (0.126) | 0.065 (0.078) |
| $Treated \times 2002$ | 0.195*** (0.032) | -0.027 (0.047) | 0.061 (0.056) | 0.113*** (0.042) |
| $Treated \times 2003$ | 0.184*** (0.031) | 0.054 (0.043) | 0.340*** (0.060) | 0.268*** (0.048) |
| Treated | 0.039** (0.016) | -0.001 (0.021) | -0.005 (0.028) | 0.044** (0.022) |
| Quarter FE | Yes | Yes | Yes | Yes |
| Controls | Yes | Yes | Yes | Yes |
| Industry FE | Yes | Yes | Yes | Yes |
| Loan type Fe | Yes | Yes | Yes | Yes |
| Loan purpose FE | Yes | Yes | Yes | Yes |
| Observations | 14,635 | 5,352 | 4,610 | 4,466 |
| R ² | 0.670 | 0.475 | 0.492 | 0.548 |
| Adjusted R ² | 0.666 | 0.459 | 0.474 | 0.541 |

Note:

*p<0.1; **p<0.05; ***p<0.01

Table 15 Placebo Test

This table reports the effect of placebo AR statute on loan spread. I falsely assume that the three states bordering Delaware are subject to the AR law. Therefore, treated dummy in this table is equal to one if a firm is incorporated in Pennsylvania, Maryland and New Jersey. The main variable of interest is the interaction term between Post and treated dummy, which is equal to one for SPV originator companies after the passage of the anti-recharacterization law and zero otherwise. All variables are winsorized at the 1% and 99% percentiles, and are summarized in Appendix B. Standard errors are reported in parentheses. Significance at the 1%, 5% and 10% level is denoted by ***, ** and *, respectively.

| | <i>Dependent variable: Log (AISD)</i> | | | | |
|-------------------------|---------------------------------------|-------------------|---------------------|---------------------|---------------------|
| | (1) | (2) | (3) | (4) | (5) |
| <i>Post × Treated</i> | 0.071 (0.120) | -0.113 (0.073) | 0.085 (0.065) | 0.072 (0.063) | 0.036 (0.063) |
| Treated | 0.128 (0.094) | 0.043 (0.081) | 0.386*** (0.065) | 0.358*** (0.063) | 0.355*** (0.064) |
| Quarter FE | Yes | Yes | Yes | Yes | Yes |
| Industry FE | No | Yes | Yes | Yes | Yes |
| Controls | No | No | Yes | Yes | Yes |
| Loan type FE | No | No | No | Yes | Yes |
| Loan purpose FE | No | No | No | No | Yes |
| Observations | 1,211 | 1,211 | 1,072 | 1,072 | 1,072 |
| R ² | 0.225 | 0.770 | 0.856 | 0.866 | 0.872 |
| Adjusted R ² | 0.201 | 0.757 | 0.845 | 0.855 | 0.861 |

Note:

*p<0.1; **p<0.05; ***p<0.01

B Variable Definition

AID Spread: All-in-drawn spread is the interest margin above LIBOR plus annualized upfront fees, in terms of basis points. Data source: DealScan.

Firm size: The natural logarithm of total book assets in millions. Data source: Compustat.

Market-to-book: Market value divided by Book value. Data source: Compustat.

Leverage: Total liabilities scaled by total assets, i.e., $(dlc + dl\text{tt})/at$. Data source: Compustat.

Profitability: The ratio of net income to book value of assets, i.e., ni/at . Data source: Compustat.

Syndicated: Dummy variable equal to one if the loan is syndicated and zero otherwise. Data source: DealScan.

Tangibility: PP&E (property, plant, and equipment) scaled by total assets, i.e., $ppent/at$. Data source: Compustat.

Cashflow : Cash and short-term investments scaled by total assets, i.e., che/at . Data source: Compustat.

Facility amount: The natural logarithm of the loan facility amount in millions. Data source: DealScan.

Maturity: The natural logarithm of the loan maturity measured in months. Data source: DealScan.

Covenant: Dummy variable that equals one if a loan has financial covenants, and zero otherwise. Data source: DealScan.

Commitment fee: The fees paid on unused amount of loan commitments.

Facility fee: Fee paid on the entire amount committed, regardless of usage.

Utilization fee: Dealscan Fee paid on the entire drawn amount once a certain usage threshold has been exceeded.

Cancellation fee: Dealscan Fee paid if the syndicated loan is cancelled before maturity. Cancellation fee is common in institutional term loan contracts and follows a decreasing trend since the origination date to the maturity date.

Upfront fee: The one-time fee paid by the borrower to lenders at the loan closing date.

Annual Fee: The annual fee paid on the entire committed amount, regardless of usage. Commitment fees and facility fees are usually mutually exclusive. In particular, credit lines contain one of these types of fees but not both.

Cancellation fee: A cancellation fee is payable if the borrower cancels the agreement before maturity.

Credit Spread: The difference in yield between the BAA- and AAA-rated corporate bonds

Term Spread: The difference in yield between the 10-year and two-year U.S. Treasury bonds

C Delaware Asset-Backed Securities Facilitation Act

Downloaded from [the State of Delaware official website](#).

§2701A Title.

This chapter may be referred to as the "Asset-Backed Securities Facilitation Act."

§2702A Intent.

It is intended by the General Assembly that the term "securitization transaction" shall be construed broadly.

§2703A Securitization transaction.

(a) Notwithstanding any other provision of law, including, but not limited to, x9-506 of this title, "Debtor's right to redeem collateral," as said section existed prior to July 1, 2001, and x9-623 of the title, "Right to redeem collateral," which became effective July 1, 2001, to the extent set forth in the transaction documents relating to a securitization transaction:

(1) Any property, assets or rights purported to be transferred, in whole or in part, in the securitization transaction shall be deemed to be no longer be the property, assets or rights of the transferor;

(2) A transferor in the securitization transaction, its creditors or, in any insolvency proceeding with respect to the transferor or the transferor's property, a bankruptcy trustee, receiver, debtor, debtor in possession or similar person, to the extent the issue is governed by Delaware law, shall have no rights, legal or equitable, whatsoever to reacquire, reclaim, recover, repudiate, disaffirm, redeem or recharacterize as property of the transferor any property, assets or rights purported to be transferred, in whole or in part, by the transferor; and

(3) In the event of a bankruptcy, receivership or other insolvency proceeding with respect to the transferor or the transferor's property, to the extent the issue is governed by Delaware law, such property, assets and rights shall not be deemed to be part of the transferor's property, assets, rights or estate.

(b) Nothing contained in this chapter shall be deemed to require any securitization transaction to be treated as a sale for federal or state tax purposes or to preclude the treatment of any securitization transaction as debt for federal or state tax purposes or to change any applicable laws relating to the perfection and priority of security or ownership interests of persons other than the transferor, hypothetical lien creditor or, in the event of a bankruptcy, receivership or other insolvency proceeding with respect to the transferor or its property, a bankruptcy trustee, receiver, debtor, debtor in possession or similar person. It is not the purpose of this chapter to change the tax treatment of securitizations that take place pursuant to this chapter.