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Regulation and Implicit Recourse in Consumer Loan ABS

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Abstract

Past research has documented the sensitivity of spreads on securities backed by consumer loans to the credit rating of the securitization sponsor, and has suggested this sensitivity provides evidence of implicit recourse to the sponsor. However, other features of the securitization, such as loan servicing or pool replenishment, may also account for this sensitivity. Knowing the source of this sensitivity is important to understand the amount of risk retained by securitization sponsors. Using data on individual auto loan and credit card securities, I find this sensitivity varies weakly across asset and sponsor types in ways consistent with implicit recourse. For example, the cost of implementing implicit recourse may be higher for banks than for non-banks because bank regulators have taken a more active role in uncovering evidence of implicit recourse. Accordingly, a one-notch downgrade of a bank sponsor does not appear to influence its auto ABS yields, whereas a one-notch downgrade of a non-bank sponsor does.

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Introduction

Recent research has suggested that credit card banks that securitize assets implicitly agree to provide support to the securitization beyond their contractual obligations, particularly if the credit quality of the assets in the pool deteriorates. Higgins and Mason (2004) show that despite being a violation of regulatory guidelines, the use of implicit credit support—or recourse—by banks that sponsor securitizations increased bank performance both in the short and in the long-term. Calomiris and Mason (2004) outline how banks avoid minimum capital regulation through securitization with implicit recourse, but conclude that securitization with recourse more likely reflects efficient contracting than an abuse of FDIC deposit insurance. Gorton and Souleles (2006) show how implicit recourse may create a link between the corporate debt ratings of the securitization sponsor and the initial spread of the securities, and they present evidence of this link in the market for credit card asset-backed securities (ABS). However, securitizations sponsors may also be linked to their ABS through routine servicing and replenishment of loans in the pool. Knowing whether the sensitivity of ABS spreads to the corporate debt ratings of their sponsors suggests implicit recourse or one of these other links is important in order to understand the amount of risk retained by securitization sponsors.

Peter Tufano notes that the Gorton and Souleles model “describes a ‘wink-wink-wink’ equilibrium, where issuer, investor—and regulator—willingly turn a blind eye to the sponsor providing the credit support.” This paper focuses on the final ‘wink’—that of the regulator. Different ABS sponsor types have different regulators; both commercial banks and finance companies are subject to SEC disclosure rules, but commercial banks are also supervised and regulated by members of the Federal Financial Institutions Examination Council, who monitor securitizing banks for signs of implicit recourse. If implicit recourse is causing the link between the spread of ABS and the corporate rating of its sponsor, one might expect this link to be weaker for commercial banks than for finance companies. This paper presents some preliminary support for this hypothesis in security-level data on securitizations sponsored by commercial banks and finance companies over the past twenty years.

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Why securitize consumer loans?

A financial institution can raise funds in the capital market by pooling assets such as credit card receivables and selling them to a trust.¹ The institution, also known as the “sponsor” of the securitization, sets up the trust as a bankruptcy-remote, special purpose entity so that the receivables are sold in a “true sale.” By creating a true sale of assets, the sponsor isolates the assets from a bankruptcy proceeding, should one occur, and can remove the assets from their balance sheet.²

The trust sells securities to investors and pays the securities’ coupon with the cash flow generated by the pool of loans. These securities—called asset-backed securities—are issued in several tranches that may vary by maturity, credit rating, or both. The largest tranche is typically given the highest rating possible by the major credit rating agencies because it has the highest claim on the gross yield of the assets. This gross yield, which includes finance charges, fees, and recoveries, is used to pay the coupon on the ABS and a fee for account management (servicing fee). The gross yield that remains after these expenses—known as excess spread—may be released to the sponsor. This excess spread is an example of a residual claim to the securitized assets, and commercial banks that receive excess spread income may be required to hold regulatory capital against it.

Financial institutions can benefit from raising funds in this manner because securitization isolates the ABS investor from the credit risk of the securitization sponsor. Because the assets are held in a bankruptcy-remote trust, the ABS investor has the highest claim on the gross yield of the assets. Even actions that lead the sponsor into bankruptcy should not disrupt the coupon payments to the ABS investor. However, in some cases the bankruptcy of the sponsor is a triggering event that may cause the ABS to amortize earlier than expected.

Owing to this isolation, ABS are often given a higher rating than the corporate rating of its sponsor, resulting in ABS coupons that are lower than those of the unsecured corporate debt of their sponsor. For example, in a sample of ABS issued by the largest

¹ For more details about securitization, see Gorton and Souleles (2005), Lang, Mester, and Vermilyea (2005) and Furletti (2002).

² Commercial banks that remove securitized assets from their balance sheet are not required to hold regulatory capital against the entire pool of assets, but may be required to hold capital against residual claims on it.

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auto and credit card ABS sponsors, sixty-two percent of the ABS was rated AAA, but the typical rating of the sponsor's senior, unsecured debt was only A2. High ABS ratings also increase number of investors who can purchase the securities. For example, AAA-rated ABS may be purchased by investors subject to ERISA standards.

Because the AAA rating is crucial to the success of securitization as a funding alternative, the stream of payments to the highest tranche is also protected by credit enhancements. The first credit enhancement are the lower tranches, which have a junior claim on the cash flow of the assets and do not receive payment until the coupon on the top tranche has been distributed. Other credit enhancements include reserve accounts, which may be funded at the beginning of the securitization transaction, or may be built up with the excess spread over the course of the transaction. The funds in the reserve accounts are used to pay the coupon of the senior tranche if the gross yield of the assets is insufficient. The terms of the credit enhancements are outlined in the legal documents governing the securitization. However, a sponsor may also choose to provide credit enhancements beyond their contractual obligations, a practice known as implicit recourse.

The incentive to provide implicit recourse

Why might an ABS sponsor provide implicit recourse?

Gorton and Souleles (2006) demonstrate one incentive of firms to provide implicit recourse using a model of securitization as a game between the sponsor and investors. The sponsor finances projects using either on- or off-balance-sheet (securitization) financing. The sponsor chooses unobservable actions that affect the probability a project is a profitable investment, and must choose a high level of effort to ensure profitability. After observing the profitability of each project, the sponsor chooses which project to keep on its balance sheet and which to transfer to an ABS-issuing special-purpose vehicle (SPV). These key assumptions introduce both moral hazard and adverse selection into the model.

In a single period game, Gorton and Souleles show the sponsor cannot commit to transferring a high-quality project to the SPV because it can ensure its own solvency by keeping the high-quality project on its balance sheet and transferring the low-quality project to the SPV. Because the SPV holds the unprofitable investment, it will default;

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thus, no investor would choose to invest in the SPV's debt. If the bank could explicitly commit to subsidizing the SPV when it is in default, the adverse selection issue would be overcome and the benefits of securitization could be realized. However, such an explicit commitment would violate accounting rules regarding the bankruptcy-remote nature of the SPV and the benefits of off-balance sheet financing would be lost.

Implicit commitment is possible in a repeated game. The commitment is enforced by an unwritten understanding that if the sponsor fails to subsidize the SPV when it is in default, the investors will not invest in the debt issued by the SPV in the future. As noted by members of the Federal Financial Institutions Examination Council (FFIEC) "Banking organizations typically have provided implicit recourse in situations where the originating organization perceived that the failure to provide this support, even though not contractually required, would damage its future access to the asset-backed securities market."³

Implicit recourse and the structure of ABS

Implicit recourse may be more or less difficult to achieve in practice because ABS structures differ across asset type. For example, credit card receivables do not have a fixed term, so credit card ABS have a revolving period during which the sponsor replenishes loans in the pool. This feature provides the sponsor an opportunity to introduce higher-quality assets into the pool, an opportunity not available to auto loan ABS sponsors, and suggests that implicit recourse is more easily provided by the sponsor of credit card ABS than auto loan ABS.

Legal and structural differences between auto loan and credit card ABS may also affect the extent to which sponsors are able to offer implicit recourse. As noted earlier, implicit recourse may arise because explicit commitments to subsidize a failing SPV jeopardize the true sale of assets for bankruptcy purposes. It follows that structures in which a true sale is more difficult to achieve may encourage more implicit recourse.

³ Interagency guidance on implicit recourse in asset securitizations, May 23, 2002. pg. 3. <http://www.federalreserve.gov/boarddocs/srletters/2002/sr0215.htm>

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Implicit recourse and the regulatory environment

Differences in the regulatory environment between sponsors may also affect implicit recourse. Securitizations have always been subject to registration, disclosure and reporting requirements under the Securities Exchange Acts of 1933 and 1934. However, in 2004, the SEC adopted new and amended rules governing the registration, disclosure and reporting of asset-backed securities issued after December 31, 2005. The new and amended rules were tailored specifically to solicit information relevant to asset-backed securities; information that was not previously collected because it is not relevant to corporate bonds (Regulation AB).

Relevant to this paper, the SEC amended rules capture pertinent information about the sponsor of the securitization, as well as other transaction parties, which underscores the importance of the sponsor to the value of the asset-backed securities. The rules also require the disclosure of the material terms of agreement to provide credit enhancement to the securitization, including internal enhancements such as subordination provisions, overcollateralization, reserve accounts, cash collateral accounts or spread accounts. These disclosure requirements give investors information needed to determine whether a sponsor has or will likely provide support beyond the terms of agreement—implicit recourse—so they may act accordingly.

Sponsors who are commercial banks are also supervised and regulated by members of the FFIEC. Although commercial banks are not prohibited from providing implicit recourse to a securitization, those providing such recourse are required to hold capital against the entire amount of assets sold to the trust, so the regulatory agencies keep a weather eye out for signs of implicit recourse.

Early guidance to bank supervisors regarding securitization focused on explicit—rather than implicit—recourse. In 1996, the Federal Reserve clarified and reiterated its policy about risk-based capital treatment for spread accounts that provide credit enhancement for securitized receivables.⁴ Under this policy, the existence of a spread account is considered recourse to the seller, and requires the seller to hold capital against

⁴ “Risk-Based Capital Treatment for Spread Accounts that Provide Credit Enhancement for Securitized Receivables”, FRB SR Letter 96-30.

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the entire risk-weighted amount of the asset sold, subject to the low-level recourse rule.⁵ In another supervisory letter dated May 2002, the Federal Reserve addressed inconsistencies in the regulatory capital treatment of accrued interest receivables (AIR) assets from securitizations.⁶ An AIR asset is also considered recourse to the seller because investors are paid from these cash collections before the selling institution, and is subject to the same capital requirement as the spread account.

Later guidance focused on implicit recourse. In 2002, the FFIEC issued an interagency guidance on implicit recourse in asset securitizations. In an accompanying letter to its bank supervisors, the Federal Reserve wrote:

“Supervisors should be alert for instances where a banking organization provides implicit recourse to a securitization. Providing implicit recourse can pose a high degree of risk to a banking organization’s financial condition and to the integrity of its regulatory and public financial reports. Heightened attention must be paid to situations in which an institution is more likely to provide implicit recourse, for example, when securitizations are nearing performance triggers that would result in an early amortization event.”⁷

According to the guidance, actions that point to a finding of implicit recourse include:

- Selling assets to a securitization trust or other special purpose entity at a discount from the price specified in the securitizations documents, which is typically par value;
- Purchasing assets from a trust or other SPE at an amount greater than fair value;
- Exchanging performing assets for nonperforming assets in a trust or other SPE; and
- Funding credit enhancements beyond contractual requirements.

However, not all actions taken by the sponsor or its affiliates that improve the quality of assets in the trust are treated as implicit recourse for regulatory capital purposes.

⁵ Under the low level recourse rule, a banking organization that contractually limits its maximum recourse obligation to less than the full effective risk-based capital requirement for the transferred assets would be required to hold risk-based capital equal only to the contractual maximum amount of its recourse obligation (FRB SR 96-30).

⁶ The Accrued Interest Receivable (AIR) represents fees and finance charges that have been accrued on receivables that the institution has securitized and sold to other investors (Interagency Advisory on the Regulatory Capital Treatment of Accrued Interest Receivable Related to Credit Card Securitizations, FRB SR 02-12).

⁷ “Implicit Recourse Provided to Asset Securitizations,” FRB SR 02-15.

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Supervisors are advised to take into account the impact of the action on the sponsors earnings and capital.

Evidence of implicit recourse

The sensitivity of ABS yields to the sponsor's corporate rating

The theory of implicit recourse in Gorton and Souleles (2006) requires the sponsor to be in sufficient financial health to subsidize the SPV. For example, as noted by Higgins and Mason (2004), one manner in which sponsors have provided implicit recourse is by replacing non-performing assets in the trust with performing assets; but this requires that the sponsor have assets of sufficient quality to prevent the SPV from defaulting. Thus, the financial health of the sponsor is important to the ability to provide implicit recourse.

The ability to provide implicit recourse in turn affects the ABS spread because according to the theory, implicit recourse is crucial to ABS market functioning. Thus, implicit recourse provides a link between the financial health of the sponsor and the ABS spread. In support of this hypothesis, Gorton and Souleles (2006) find that the initial spread of a credit card securitization depends on the corporate debt rating of the securitization's sponsor, one measure of financial health. The estimated effect is large; the initial yield spreads on ABS issued by sponsors with a Baa or Ba rating are 46 basis points wider than those on ABS issued by sponsors with a AA rating.

Other reasons for this sensitivity

Implicit recourse is not the sole factor tying ABS sponsors to their securitizations. In consumer loan securitizations, most sponsors also service the underlying loans. Changes in the financial health of the sponsor may indicate changes in the sponsor's ability to effectively service the loans. Because poor loan servicing may lead to higher charge-offs in the pool, investors may require higher spreads on securities backed by this pool. The importance of loan servicing to ABS is indicated by the rating agencies' introduction of ABS servicer ratings.

In addition, as noted earlier, credit card ABS feature a revolving period in which the sponsor replenishes receivables in the pool. The ability to replenish loans in the pool with new loans of comparable quality also depends on the financial health of the sponsor.

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Testing for implicit recourse

In this paper, the sensitivity of ABS spreads to the corporate rating of the sponsor will be examined across asset and sponsor type. Differences in this measure across asset and sponsor type will provide evidence whether the sensitivity of ABS yields to sponsor rating is related to implicit recourse. Because implicit recourse is easier to achieve in a revolving ABS structure, one might expect the sensitivity of credit card ABS spreads to be greater than that of auto loan ABS. However, because regulators of commercial bank ABS sponsors perhaps more actively discourage implicit recourse, one might expect the spread sensitivity of bank-sponsored ABS to be less than that of ABS issued by other types of lenders (non-banks).

Unfortunately, asset and sponsor type are usually highly correlated. Auto loans are more frequently securitized by non-banks, whereas credit card loans are more frequently securitized by commercial banks. This makes it difficult to estimate the effect of asset type and sponsor type separately. For example, if the credit card ABS spread is more sensitive to its sponsor's rating than the auto loan ABS spread, one can infer that the effect of asset type is greater than the effect of regulatory environment but cannot infer the magnitude of either effect.

Differences in the sensitivity of ABS spreads over time can also provide evidence that this sensitivity reflects implicit recourse. The interagency guidance on implicit recourse in securitizations was issued in 2002; a reduction in the sensitivity of ABS spreads to sponsor ratings after 2002 would be consistent with implicit recourse.⁸

Data

Security-level data from Bloomberg are available to test whether the ABS spread sensitivity to sponsor ratings has changed over time or differs across asset and sponsor type. Bloomberg collects data on all securities backed by non-mortgage loans, issued as far back as 1985. From this universe, all ABS issued by 14 of the largest consumer loan ABS issuers were selected into the initial sample of 2,506 securities. This initial sample is comprised of 1,256 auto loan ABS issued by finance companies (non-banks), 243 auto

⁸ Although changes in regulation are often considered exogenous to market equilibrium prices, they can be somewhat endogenous if they were in response to market developments.

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loan ABS issued by commercial banks and 1,007 credit card ABS issued by commercial banks.

Although the sponsor of the securitization is not made explicit in the dataset, in both credit card and auto loan ABS deals, loan servicing is customarily retained by the sponsor, so they are assumed to be one and the same. Each ABS observation was merged with the senior, unsecured debt rating of the sponsor at the time of issuance; these ratings were converted to a numeric scale ranging from 1 for AAA-rated securities to 17 for a B3-rated security. Thirty-nine securities from five issuers were dropped because a rating was not available at the time of issuance. The securities dropped were more likely to be from the 1990 -1994 time period, issued by a finance company rather than a bank, and have a fixed coupon, but other characteristics of these securities were not significantly different from the final sample (see Appendix table 1).

For each security, the initial price, coupon, frequency of payment, and maturity was used to calculate the yield to maturity, which was then expressed as a spread over the yield of a Treasury security with a comparable maturity. For floating rate securities, the coupon at issuance was calculated as the quoted spread over LIBOR plus the rate paid by the fixed-rate payer on a 3-month LIBOR interest rate swap with a comparable maturity to the ABS. Floating rate securities issued prior to 2000 were excluded because swap rate data were unavailable.

A large fraction of observations – 27 percent – were missing the information needed to calculate the initial yield to maturity. Only a small share of securities is missing data for maturity or frequency of coupon payments. However, about fifteen percent of observations are missing initial price data, about nine percent of observations are missing coupon data, and two percent of observations are missing both price and coupon data. The vast majority of observations with missing coupon data are floating rate securities – mainly credit card ABS – issued between 1992 and 2000, during which time swap data were not available (see Appendix table 1). They are also more likely to be in lower-rated classes, which may have been privately placed and price data are unavailable.

Thirty-five securities – about 2 percent – were dropped because their initial spread was greater than 2.5 standard deviations from the average spread in the year of their issuance. Most of these outliers were issued between 2000 and 2004. They were more

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likely to be fixed rate securities and on average had higher coupons (perhaps owing to their longer maturity), but were just as likely as the final sample to have been issued by a non-bank or a bank, or to be auto or card ABS. They were much more likely to be in the lower-rated classes of the securitization.

The final sample has 1,758 observations. Just over half of these securities were issued from 2000 to 2004, and another quarter was issued more recently (Table 1, column 1). The average spread of these securities over comparable-maturity Treasury yields is 45 basis points, based on an average coupon of just over 4 $\frac{3}{4}$ percentage points, and about 65 percent of these coupons are fixed over time. The average maturity of the securities is about 5 years and 4 months and about 88 percent of them were in the two highest-rated tranches. The average rating for the ABS sponsors in the sample is about 6, which translates into a rating of A2. The most recent rating action involving the sponsor was slightly more likely to be an upgrade than a downgrade.

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Table 1: Characteristics of ABS sample

	Total	Credit card	Auto loan		
			All	Non bank	Bank
Distribution by year of issuance (percent)					
1985 - 1989	0.01	0.00	0.02 *	0.03	0.00 *
1990 - 1994	0.05	0.01	0.08 *	0.10	0.00 *
1995 - 1999	0.15	0.09	0.19 *	0.20	0.15
2000 - 2004	0.52	0.54	0.51	0.51	0.50
2005 - 2007	0.27	0.36	0.20 *	0.17	0.35 *
Security characteristics					
Spread (basis points)	0.45	0.71	0.28 *	0.32	0.10 *
Coupon (percent)	4.87	5.17	4.68 *	4.82	4.10 *
Maturity (years)	5.35	7.72	3.86 *	3.80	4.13 *
Fixed coupon (percent)	0.65	0.28	0.88 *	0.89	0.87
Class a (percent)	0.71	0.51	0.84 *	0.83	0.87
Class b (percent)	0.17	0.30	0.08 *	0.09	0.05 *
Class c (percent)	0.12	0.19	0.07 *	0.07	0.08
Class d (percent)	0.00	0.00	0.00	0.00	0.00
Sponsor rating characteristics					
Average rating	5.96	4.98	6.58 *	6.73	5.94 *
Most recent rating action					
Upgrade (percent)	0.52	0.54	0.50	0.42	0.86 *
Downgrade (percent)	0.45	0.46	0.50	0.53	0.11 *
Number of observations	1758	677	1081	871	210

*Significantly different from column on immediate left at the 5 percent or better confidence level.

About 40 percent of the observations in the final sample are credit card ABS (column 2) and 60 percent are auto loan ABS (column 3). Credit card ABS in the sample are more likely to have been issued in the last seven years of the sample than auto loan ABS, in part owing to the lack of swap rate data prior to 2000. The average maturity of credit card ABS in the sample is nearly four years longer than the maturity of auto loan ABS, which may help explain their higher coupons and spreads. Also, a significantly smaller share of credit card ABS than auto loan ABS pay a fixed coupon, and a smaller share belong to the highest-rated tranche.

About 80 percent of auto loan ABS in the sample was sponsored by a non-bank (column 4) and 20 percent were sponsored by a commercial bank (column 5). Bank-sponsored auto loan ABS has lower coupons and spreads, despite their slightly longer

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maturities. The share of fixed-rate coupons was about the same across the two types of sponsor. The average sponsor rating is almost one notch higher for bank-sponsored auto loan ABS than for non-bank-sponsored auto loan ABS.

These differences in security characteristics across credit card and auto, and bank and non-bank sponsored securitizations highlight the importance of controlling for security characteristics in the regressions to follow.

Empirical model and results

The spread of ABS yields over yields on comparable maturity Treasury securities at the time of issuance was modeled as a linear function of the securities' characteristics, dummy variables for the year of issuance and the sponsor. The sponsor rating variable captures the sensitivity of the initial spread to the rating of the sponsor. As noted in the discussion above, this sensitivity may reflect implicit recourse if it is smaller for bank-sponsored ABS or auto loan ABS. To test the hypothesis that this sensitivity reflects implicit recourse, the rating variable was interacted with whether the sponsor is a commercial bank and whether the underlying collateral is comprised of auto loans. The estimated equation is:

$$(1) \quad s_i = \beta \bar{x}_i + \gamma_r r_i + \gamma_b (r_i * b_i) + \gamma_a (r_i * a_i),$$

where s_i is the initial spread; vector x_i includes variables that capture the characteristics of the security and the environment into which it was issued. Security characteristics are the maturity in years, a dummy variable for whether the coupon is fixed over time and dummy variables for whether the ABS is in the A class or the B class. Dummy variables for the sponsor should capture differences in ABS structures across issuer and persistent differences in sponsor rating. Dummy variables for the year of issuance should capture the market environment at the time the security is issued; r_i is the sponsor rating at the time of issuance. Because the regression includes sponsor and year dummies, the effect of the sponsor rating on the initial ABS yield is identified by changes in a sponsor's rating in a particular year. b_i is a dummy variable for whether the sponsor is a commercial bank; and a_i is a dummy variable for whether the underlying collateral is comprised of auto loans. If implicit recourse explains the sensitivity of ABS spreads to sponsor rating, then it is likely that

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$$(2) \quad \gamma_r > 0, \quad \gamma_b < 0, \quad \gamma_a < 0$$

The model, which was estimated using ordinary least squares, fit the data fairly well, as indicated by an adjusted R-squared of 52 percent. Several features of the securities—maturity, whether the note has a fixed or floating coupon, and whether the note is in a subordinate tranche—significantly influence the initial spread on ABS. Longer maturity securities have higher spreads, by about 3 basis points per additional year (Table 2, column 1). Fixed coupon securities have lower spreads than floating coupons. Consistent with their lower risk, the spreads of securities in more senior tranches are lower than those in more junior tranches.

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Table 2: Effect of ABS Characteristics on Initial Spread
percentage points

	Total	Credit card	Auto loan		
			All	Non bank	Bank
Sponsor Rating	0.04 **	0.01 *	0.02 *	0.02 **	0.00
Bank sponsor*rating	-0.02		-0.09 **		
Auto ABS*rating	-0.01				
Auto ABS	-0.19 *				
Maturity	0.01 **	0.04 **	-0.01 *	-0.01 *	-0.01
Fixed coupon	-0.40 **	-0.28 **	-0.45 **	-0.42 **	-0.51 **
Class A	-0.54 **	-0.68 **	-0.41 **	-0.51 **	-0.03
Class B	-0.30 **	-0.42 **	-0.13 **	-0.21 **	0.07
Intercept	1.05 **	0.72 **	1.02 **	1.03 **	0.69 **
Observations	1758	677	1081	871	210
Adjusted R-squared	0.62	0.72	0.57	0.57	0.59

*Significantly different from zero at the 1 - 5 percent confidence level.

**Significantly different from zero at the 1 percent or better confidence level.

The initial spread also appears sensitive to the sponsor's corporate bond ratings. ABS issued by sponsors with higher corporate bond ratings have lower initial spreads than those issued by sponsors with lower ratings, about 4 basis points for each notch difference in rating. Consistent with implicit recourse as one cause of this sensitivity, it is a bit lower for bank sponsored ABS than for non-bank sponsored ABS. This may reflect the additional layer of regulatory scrutiny afforded to commercial banks. In addition, the effect of rating on the initial spread is also lower for auto ABS than it is for credit card ABS. This may be a result of the structure of credit card ABS, which may make implicit recourse easier in practice. In this regression, the additional effects of a

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bank sponsor and auto collateral on this sensitivity are not significantly different from zero at the five percent level. However, as shown in table 3, the initial spread of credit card ABS and those with non-bank sponsors show some sensitivity to the sponsor's rating, whereas the spreads of bank-sponsored auto ABS do not.

Table 3: Sensitivity of Initial ABS Spread to Sponsor Rating
basis points

	Auto ABS	Card ABS	Difference
Bank sponsor	0.9	1.9 *	-1.1
Nonbank sponsor	2.7 **	3.8 **	-1.1
Difference	-1.9	-1.9	

*Significantly different from zero at the 1 - 5 percent confidence level.

**Significantly different from zero at the 1 percent or better confidence level.

To investigate this result further, initial spreads were regressed on sponsor ratings for credit card and auto loan ABS separately, and bank and non-bank sponsored auto ABS separately. When estimated separately, the initial spread among non-bank sponsored auto ABS is sensitive to the rating of the sponsor, but the spread among bank-sponsored ABS is not. When bank and non-bank auto ABS are estimated together, the results also suggest that the sensitivity of bank-sponsored auto ABS is lower than that of non-bank sponsored ABS. However, this regression also indicates that the initial spread of bank-sponsored auto ABS falls with a downgrading of the sponsor rating; an unintuitive result.

A potential reason for the difference in sensitivity between auto and credit card ABS and bank and non-bank sponsors, perhaps unrelated to implicit recourse, is that over the sample period, the ratings of auto loan ABS sponsors were downgraded significantly more times than credit card ABS sponsors, and non-bank ABS sponsors were downgraded significantly more times than bank ABS sponsors. To the extent that sponsor upgrades and downgrades have different effects on ABS spreads, this asymmetry between changes in auto loan and credit card ABS sponsor ratings may be influencing the

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results. A dummy variable for whether the most recent rating action was an upgrade was interacted with the rating variable and included in the specification. The effect of this variable on the initial ABS spread was negligible, but its inclusion reduced the sensitivity of the spread to sponsor rating for auto loan ABS, which indicates that some of the difference in sensitivity between auto and credit card ABS spreads may in part reflect fewer upgrades among auto ABS sponsors than among credit card ABS sponsors.

As noted earlier, interagency guidance focusing on implicit recourse was issued in 2002, so splitting the sample into pre- and post-2002 may also shed light on whether the ABS spread sensitivity is a result of implicit recourse. As shown in table 4, the initial spreads on the 47 percent of the sample issued in 2002 or earlier are more sensitive to the corporate rating of the sponsor than are ABS issued after 2002. For example, bank-sponsored credit card ABS dropped from 4.3 basis points (marginally significant) to 1.9 basis points. However, the sensitivity of spreads of non-bank sponsored ABS declined by even more, casting some doubt that the sensitivity is owing to implicit recourse.

Table 4: Sensitivity of Initial ABS Spread to Sponsor Rating

by year of issuance
basis points

	Auto ABS	Card ABS	Difference
2002 and earlier			
<i>Bank sponsor</i>	0.4	4.3	-4.0
<i>Nonbank sponsor</i>	4.1 **	8.0 **	-4.0
<i>Difference</i>	-3.7 **	-3.7 **	
After 2002			
<i>Bank sponsor</i>	0.4	1.9 *	-1.5
<i>Nonbank sponsor</i>	-0.2	1.3	-1.5
<i>Difference</i>	0.6	0.6	

*Significantly different from zero at the 1 - 5 percent confidence level.

**Significantly different from zero at the 1 percent or better confidence level.

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Discussion

Overall, these results hint that the sensitivity of ABS spreads to the corporate rating of the sponsor reflects implicit recourse. In particular, they imply that the initial ABS spread is more sensitive for credit card ABS than auto loan ABS, and for non-bank sponsors than bank sponsors. Moreover, the sensitivity appears to have declined after 2002 following the release of interagency guidance regarding implicit recourse. However, these results should be viewed with some caution. Not all of the results are statistically significant at the five percent or better confidence level, perhaps because the small number of rating changes in the sample does not provide enough variation for identification. In addition, a few results are puzzling, such as the finding that the initial spread of bank-sponsored auto ABS falls with a downgrading of the sponsor's ratings. Thus, these findings remain preliminary.

In addition, this analysis assumes that the ratings agencies accurately assess risk when assigning ratings to both ABS and its sponsors. If these risks are assessed with error, correlation between errors in a sponsor's corporate debt rating and its' ABS rating may be exhibited as a correlation between the sponsor's corporate debt rating and ABS spreads.

Preliminary and Incomplete. Please do not quote or cite.

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Table A1: Characteristics of ABS selected sample

	Final Sample	Missing Rating	Missing Yield	Outliers
1985 - 1989	0.01	0.08	0.00 *	0.00 *
1990 - 1994	0.05	0.33 *	0.10 *	0.00 *
1995 - 1999	0.15	0.05 *	0.37 *	0.13
2000 - 2004	0.52	0.51	0.35 *	0.65
2005 - 2007	0.27	0.03 *	0.18 *	0.23
Auto	0.61	0.74	0.54 *	0.65
Bank	0.50	0.26 *	0.50	0.55
Coupon	4.87	4.60	4.44 *	6.01 *
Maturity	5.35	5.05	6.01 *	7.61 *
Fixed rate	0.65	0.95 *	0.52 *	0.81 *
Class A	0.71	0.72	0.46 *	0.26 *
Class B	0.17	0.26	0.28 *	0.16
Class C	0.12	0.03 *	0.19 *	0.42 *
Class D	0.00	0.00	0.06 *	0.16 *
Rating	5.96		6.58 *	7.48 *
Most recent rating action				
Upgrade	0.52		0.52	0.52
Downgrade	0.45		0.45	0.48