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The Effect of SFAS 140 Disclosures on the Launch Spreads of Credit Card Receivables Asset-Backed Securities

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The purpose of this research paper is to analyze the launch spreads of newly issued credit card receivables Asset Backed Securities (ABS) after the adoption of new accounting disclosure regulations. We focus specifically on examining the impact of Statement of Financial Accounting Standard (SFAS) 140 disclosures on credit card receivables ABS to assess whether the spreads were lower after SFAS 140 adoption. We regressed ABS spread before and after implementation of SFAS 140 against disclosure variable projected loss and control variables. The results suggest that the SFAS 140 disclosure regime provides useful information for investors to evaluate the risks associated with credit card ABS as reflected by lower spreads after adoption.

Keywords: Securitizations, Asset-Backed Securities (ABS), Credit Card Receivables, Launch Spreads, Disclosures, SFAS 140

Introduction

The composition of the securitization market has changed dramatically since its inception in 1970. From only mortgages as the sole underlying asset class to its partitioning into two main categories: mortgage-backed (only primary mortgages) and asset-backed with several underlying asset classes such as automobile loans, credit card receivables, student loans, CDO/CLO. This segment of the bond market has grown to comprise approximately 25 percent of the fixed income market. The various underlying asset classes have waxed and waned in their relative contribution to the overall issuance market as newer asset classes have been added due to financial innovation. For example, early on, automobile loans and credit card receivables were the largest after mortgages. In 1987, credit card asset-backed securities issuance was 23 percent of the asset-backed securities (ABS) market and student loans and CDO/CLOs were not even used as underlying asset classes. In 2018, CDO/CLOs comprised 54 percent and credit card receivables comprised 6 percent of the ABS issuance market (Securities Industry and Financial Markets Association).

As this market has grown in both size and importance to the capital markets, accounting regulations have also had to change and adapt to increasingly more complex instruments as the existing rules were inadequate to effectively deal with emerging issues and concerns of market participants. Accounting and the rules that govern its practice exist to provide the means by which issuers of securities inform potential investors about the risks associated with a given investment instrument or security. Accounting disclosures are designed to provide additional information about the risks that are not recorded in the body of the financial statements. In 2001 the Financial Accounting Standards Board (FASB) adopted Statement of Financial Accounting Standard (SFAS) 140 to addressconcerns that existing disclosures were inadequate to properly assess risks in the issuance of securitizations.

The objective of this study is to analyze whether the disclosures required in SFAS 140 were effective is assessing the risks associated with issuing credit card ABS. Vink and Thibeault (2008) suggest that while mortgage-backed securities (MBS) and ABS are similar in structure, they are in fact different financial instruments. This study extends Wharton et al.'s (2018) study by examining the SFAS 140 disclosures within the context of credit card receivable ABS. During the years examined in this study,1999 to 2003, credit card ABS were one of the three largest single asset ABS in the securitization market with total issuance volume of $291.8 billion and average outstanding volume of $265 billion (Securities Industry and Financial Markets Association).

The results of this study reveal that mean spreads of credit card receivables ABS are smaller after the implementation of SFAS 140 and there is a strong statistical association with the SFAS 140 disclosures. These findings suggest that the SFAS disclosures provide information that is useful in evaluating risk of credit card receivable ABS.

Literature Review

The literature has established that in both the primary and secondary markets increased disclosure has value for fixed income and equity securities (Sengupta, 1998; Leuz & Verrecchia, 2000; Dobler, 2005; Tadesse, 2006; Shi, et al, 2007; Baber & Gore, 2008).Vink and Thibeault (2008) using a sample of European MBS, ABS and CDOs investigate shared pricing factors to establish if these factors act differently in the determining primary market spreads. The study uses the Chow Test and an ordinary least squares regression model in its test. In most instances these common factors demonstrated significantly different coefficients throughout the examined security classes. The results of this study suggest that MBS, ABS and CDOs, though apparently similar in structure, are different financial instruments. Tian and Zhang (2017) examine the impact of the adoption of SFAS 166/167 in securitizing credit card loans. The study observes that credit card securitizations decrease significantly after SFAS 166/167 implementation. The study finds that pre-SFAS 166/167 the quality of credit card loans is higher than that of post SFAS 166/177. The findings suggest that banks securitize fewer credit card loans because of reduced regulatory capital arbitrage opportunities post SFAS 166/167.

Vink and Fabozzi (2009) examine the elements that impact primary market spreads of non-US asset-backed securities. The analysis also tests whether investors only consider credit ratings in their risk assessment of asset-backed securities. Employing a panel-data fixed effects model the study finds the two most prominent considerations in the determining spreads in the primary market are conditions in the bond market and credit ratings. The paper concludes in its test of the over-reliance theory that investors consider additional factors along

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with credit ratings in assessing risk. They conclude that it is an overstatement to say that investors rely solely on credit ratings. Jackson (2010) enters into the debate on securitization market reform by examining the idea of mandated securitization disclosures. The requirement of loan-level disclosures in an effort to increase transparency and enabling better securitization issue pricing is the primary focus of the paper. The paper's case for loan-level disclosures rests on the additional public policy benefits as well as the desired increased transparency. It acknowledges the loan-level disclosures may supply more information than that currently sought by investors in increasing transparency. The mandated disclosures would be worthwhile in policing the Equal Credit Opportunity Act, regulating solvency of financial institutions and renegotiating troubled mortgages.

Mahlmann (2011) used a US sample of ABS-CDOs (Collateralized Debt Obligations backed by tranches of Asset-Backed Securities) to test the ratings overdependence hypothesis. The results suggest, in pricing CDO tranches at origination, investors do not rely only on credit ratings primarily for non-AAA rated tranches and even after taking into account credit ratings, at issuance, yield spreads demonstrate some predictive ability of future performance. The results further suggest, over time and for lower rated tranches in complex CDO deals the information content of spreads decreases and the correlation between credit ratings and spread increases over time. These findings in sum suggest it may be worthwhile to rethink the overdependence hypothesis. He et al. (2012) examine the effect of issuer size on MBS issue pricing. With the current credit ratings compensation model the issuer pays the credit rating agency. With this business model credit ratings agencies have an economic incentive to assign higher credit ratings to issues from the issues of large issuers. The paper studied the spreads of like- rated MBS issues from both large and small issuers. The study observed higher yields with large issuer tranches compared to like rated tranches of small issuers. It also found prices drop more for large issuer tranches than tranches of small issuers. In 2004-2006, the MBS market boom years, these differences were more concentrated. The finding suggests that the pricing of like-rated MBS small issuer versus large issuer tranches is realized and adjusted by the market. It also suggests there is distortion of the ratings process by regulatory arbitrage and ratings-based regulation.

Gurtler and Hibbeln (2013) using a European sample of ABS and MBS partitioned as being information sensitive (lower credit ratings) or information insensitive (higher credit ratings) examine the pricing of securitization issues as measured by spread whether investors consider the lack of screening and monitoring incentives. Results suggests that the type of retention employed by the issuer plays a role in the pricing of securitization tranches. Investors demanded higher spreads for vertical slice retention than equity tranche retention for information sensitive (lower credit rated) tranches. Investors demanded lower spreads for vertical slice retention than equity tranche retention in information insensitive (AAA-rated) tranches. The results suggest consideration of information asymmetry by investors of higher credit rating tranches when pricing securitizations. Wharton et al. (2018) (WSN) studies the effect of the SFAS 140 disclosures on the primary market launch spreads of mortgage-backed securities (MBS). The results suggest that the SFAS 140 disclosures contributed to lowering MBS launch spreads demanded by investors. The analysis also suggests investors assign more importance when pricing newly issued MBS to the weighted-average life disclosure than the project losses disclosure. Wharton et al. (2019) extends the findings in WSN to the asset class automobile loan asset-backed securities using a similar methodology. The findings support the hypothesis that suggests the disclosures required by SFAS 140 were a factor in reducing the spreads of automobile loan ABS.

The extant securitization literature has focused primarily on various characteristics of the issuer (He et al., 2012) or factors such as credit ratings or issue volume, (Vink & Fabozzi, 2009; Mahlmann, 2011; Tian & Zhang, 2017). However, we did not find substantive treatment of tranche level analysis for securitizations and the performance of the underlying assets that are at play in influencing the yield spread of a given tranche.

The authors are motivated to apply similar methodology to Wharton, Sharma and Nguyen (2019) to test the impact of SFAS 140 on a different asset class of ABS (credit card receivables) realizing that automobile loan and credit card receivables are different financial instruments (Vink & Thibeault, 2008; Wharton & Sharma, 2016). Credit card receivables, unlike mortgages and automobile loans, are not fixed term loan obligations, i.e. a credit card loan obligation has no explicitly stated term to maturity. Therefore, the only applicable SFAS 140 disclosure for credit card receivables ABS is the projected losses disclosure, which will be the main dependent variable of interest in this study.

Hypothesis Development

With the exception of Wharton et al. (2018) there has not been much attention in the literature on the effect of accounting disclosures on the yields or yield spreads of securitization issues. This paper extends the findings of WSN and examines the effect of accounting disclosures, specifically SFAS 140, on credit card receivable ABS yield spreads. This study draws on both the disclosure and securitization literature to examine the effect of SFAS 140 disclosures on the spreads of credit card receivable ABS that were issued between 1999 and 2002. There are various mechanisms to share information to enable potential investors for risk assessment of a newly issued security (Leuz & Verrecchia, 2000). The Securities Act of 1933 requires security issuers provide an offering document known as a prospectus to potential investors to determine the risks of a given securities issue.

Securitizations have more potential layers of asymmetric information than traditional fixed income securities (Albertazzi et al. 2015). The originators of the credit card loan assets that underlie the security, have superior knowledge of the details of a given loan or credit card account and its eventual repayment prospects over the offeror of the ABS if the originator and offeror are different entities. In the event the originator is different from the offeror, the originator will sell the loans that will make up the ABS asset pool to the offeror. The offeror, typically an investment bank, in designing the ABS by determining the structure, i.e., how many tranches and levels and sizes of the tranches, the nature and extent of credit enhancement, etc. possesses an information advantage over the eventual investors of an ABS issue.

Potential ABS investors are exposed to less risk when they are provided more information about the projected performance of an ABS pool (Wharton et al., 2019). Generally, additional information should reduce the risk perception resulting in less compensation demanded by investors (Wharton et al., 2018). We hypothesize that the additional information disclosures required by SFAS 140 will decrease the information asymmetry between the issuer and investors about the projected performance of the underlying assets. This decreased information asymmetry should reduce launch spreads after SFAS 140 implementation.

H1: The post SFAS 140 yield spreads of credit card receivable (ABS) will be smaller as compared to the yield spreads of ABS issued pre SFAS 140.

The projected losses disclosure is an estimate of the total losses an underlying asset pool is expected to experience over the ABS issue's life. It is calculated as a percentage value of the total asset pool. The performance of the asset pool directly influences the ability of a given credit card ABS issue to make timely principal and interest payments to investors. Investors will demand higher yields on ABS issues that experience larger losses. The marketplace values projected losses information. This is useful in assessing risk as proxied by yield spread.

H2: The post SFAS 140 yield spreads of credit card receivables ABS will have a positive statistical association with the projected losses (*LossProj*) disclosure.

Data and Sample Selection

The sample is comprised of credit card receivable ABS issued between 1999 and 2003 listed in the Thomson SDC new issue database. Table 1 reports the descriptive statistics of the pre and post SFAS 140 subsamples for the credit card receivables ABS. This asset class is one of the largest non-mortgage related ABS in terms of dollar amount issued during the sample period.

Credit card receivable ABS are approximately 23 percent of the non-mortgage related ABS issued during the sample period. The principal value of the sample totals $101.3 billion, approximately 35 percent of the newly issued credit card receivable ABS ($289.6 billion) brought to market during the years 1999 through 2003. The sample was divided into two subsamples;" pre" SFAS 140 and "post" SFAS 140.

Data related to SFAS 140 disclosure variables and control variables were collected from prospectuses filed with the SEC by ABS issuers as reported in the SEC Edgar Central Index Key (CIK) Lookup website. The sample includes a total of 265 (117-pre/148-post) individual tranches from 129 ABS transactions (55-pre/74-post) from 1999 to 2003.

The total sample period corresponds to approximately 2 years before and 2 years after the SFAS 140 effective date, April 1, 2001. We divided the total sample into pre- and post- SFAS 140 subsamples. The pre SFAS 140 subsample is comprised of ABS issued before the implementation of SFAS 140. The post SFAS subsample is comprised of ABS issued after the implementation of SFAS 140.

The pre SFAS 140 subsample, had 30 (26 percent) issues with fixed coupons and 87 (76 percent) issues with floating-rate coupons. The post SFAS 140 subsample had 30 (20 percent) issues with fixed coupon and 118 (80 percent) issues with floating-rate coupons. We observed that floating-rate coupon issues were the predominant coupon type for both pre- and post- subsamples. (See Table 2)

The characteristics of a credit card receivable ABS issue including credit enhancement and type of coupon affect the risk as measured by yield. Credit enhancement is employed in securitizations in several ways including senior subordination, overcollateralization, excess spread accounts, surety bonds (insurance), letters of credit and cash collateral accounts. We defined the credit enhancement mechanisms into either internal or external. Internal credit enhancement is accomplished using features within the underlying asset pool. External credit enhancement is when the enhancement is performed by sources outside of the underlying asset pool. Internal credit enhancement includes subordination, overcollateralization and excess spread accounts. Whereas, external credit enhancement consists of surety bonds, letters of credit and cash collateral accounts.

The pre SFAS 140 subsample had 81 (69 percent) issues with only internal credit enhancement and 36 (31 percent) issues used external credit enhancement. In the post SFAS 140 subsample, there were 147 (99 percent) issues with internal credit enhancement and 1 (less than 1 percent) issues with external credit enhancement. This indicates that internal credit enhancement is the dominant credit enhancement mechanism for both pre-and post- subsamples, however the use of internal credit enhancement was overwhelming (99 percent) in the post subsample.

Model Development and Methodology

To test H1, we will use a difference of means t-test methodology. We hypothesize that yield spreads will be lower on post SFAS 140 ABS issues than yield spreads on pre ABS issues. Upon determining that spreads are lower for post SFAS 140 securitizations issues, we will use OLS regressions to test H2 and determine whether and to what extent the SFAS 140 disclosures affect the spreads of securitizations issues.

Model:

$$YLDSPREAD = \beta_0 + \beta_1 LossProj + \beta_2 SlopeYld + \beta_3 PrinBal + \beta_4 CoupTyp + \beta_5 Mature + \beta_6 Rating + \beta_7 BdSpread + \beta_8 Period + \varepsilon$$

YLDSPREAD = the securitization's yield minus the yield of the Treasury security of comparable maturity.

LossProj = the losses that are projected to occur on the underlying assets of a securitization issue.

SlopeYld = Treasury yield curve slope. The difference, on a given date, between the yield on the twenty -year Treasury and the yield on the one-year Treasury.

PrinBal = original amount of principal borrowed

CoupType = type of coupon. A fixed coupon (Fx) remains the same for the entire life of the securitization issue. A floating rate (Flt) coupon indicates the rate of interest that will determine the periodic interest payments investors will receive from the securitization issue will vary (float) based on a floating-rate interest rate index such as LIBOR (London Interbank Offered Rate).

Mature = the stated time (number of years) to maturity of the securitization issue

Rating = credit rating. The credit rating assigned by Standard & Poor's to the issue.

BdSpread = AAA bond spread. The spread of traditional AAA rated bonds to the 10-year Treasury bond. This variable controls for macroeconomic factors that might influence the spread on high quality fixed income securities.

Period = the time period the issue was brought to market. Time is divided into two periods, pre and post SFAS 140 effective date (April 1, 2001).

We will use a Chow test to determine if the relationship between ABS yields and other model variables indicates a pre/post SFAS 140 structural change. (Vink & Thibeault 2008) suggest that MBS and ABS are different financial instruments using the Chow test methodology.

Results

We performed a Chow test to identify whether or not a structural break occurred between the pre and post SFAS 140 time periods. The results yielded an F-value of 13.48 and a p-value = <<0.0001, which strongly demonstrate a structural break between pre and post SFAS 140 time periods. (Table 3 Section A). This structural break suggests that the relationship between the dependent variable, spread, and the independent variables in the model changed because of the adoption of SFAS 140.

Table 1: Descriptive statistics

	Pre SFAS 140 Sub Sample (n=117)			Post SFAS 140 Sub Sample (n=148)		
Variable	Mean	Median	Std. Dev	Mean	Median	Std. Dev
Coupon	5.7909	5.6385	0.5871	2.5240	2.1763	1.1931
Mature	7.2500	7.3722	1.9018	7.0718	7.0289	2.1943
Principal	350.5269	350.0000	329.8787	407.6434	200.0000	429.7899
YldSpread	*0.1537*	*0.1338*	*0.6397*	*-1.0338*	*-1.2844*	*1.1297*
YldSpread**	0.6671	0.6315	0.2274	0.2491	0.1435	0.9936
SlopeYld	0.9887	1.0800	0.3581	3.5482	3.5900	0.4476
LossProj	5.8849	5.7600	1.6488	5.8127	5.5900	1.1444
BdSpread	*1.5171*	*1.4200*	*0.2522*	*1.8520*	*1.8500*	*0.3276*

** Floating rate coupon issues removed from sample.

Table 2: Sample Characteristics

	Pre FASB 140			Post FASB 140		
	Year	Security Tranches	Total	Year	Security Tranches	Total
Fixed Coupon	99	28		01A	7	
	00	2		02	1	
	01B	0	30	03	22	30
Floating Coupon	99	53		01A	6	
	00	14		02	37	
	01B	20	87	03	75	118
Internal Enhancement	99	54		01A	13	
	00	15		02	38	
	01B	12	81	03	96	147
External Enhancement	99	27		01A	0	
	00	1		02	0	
	01B	8	36	03	1	1

The univariate results (See Table 3 Section B) offer strong support for H1. The mean spread for the pre subsample is 0.1537 and the mean spread for the post subsample is -1.0338. When we removed the floating rate issues from the subsample, the mean spread for the pre subsample is 0.6671 and the mean spread for the post subsample is 0.2491. The differences of means t-test resulted t-statistic and p-value of 10.7863 and <<0.0001 respectively. When we removed the floating rate issues from the sample, the t-statistic and p-value were 2.2464 and 0.0159 respectively. To further test whether the lower yield spreads for ABS were merely the result of declining spreads in the fixed income market overall during the sample period, we examined the spreads of traditional AAA-rated bonds on the same days as the sample ABS issues for the entire sample period, pre and post SFAS 140. Bond yield spreads for traditional AAA-rated corporates that were matched with the ABS issue dates for pre and post were 1.5171 and 1.852 respectively. The matched traditional bond spreads differences of means for the pre and post time periods were very strong with p-values of <<0.0001. The yield spreads of traditional bonds increased by statistically significant margins while the credit card ABS yield spreads decreased by statistically significant margins.

Viewed as a whole, these univariate findings offer strong support to suggest that the SFAS 140 disclosures have reduced the information asymmetry, proxied by the yield spreads, for credit card ABS. These findings are strengthened with the mean yield spreads on traditional AAA-rated corporate bonds actually *increasing* by statistically significant margins post SFAS 140. We used an OLS regression model to study the relationship between the dependent variable, spread, and the independent variables SFAS 140 disclosure, LossProj, as well as the control variables in a multivariate setting. We ran three regression scenarios: (1) full sample, (2) pre subsample, (3) post subsample using various models ranging from simple to full with interactions and control variables.

For the full sample simple model with only LossProj as the independent variable (See Table 4A), LossProj has the expected sign but is not statistically significant.

When the period variable and an interaction term (LossProj*Period) is added to the basic model, LossProj has possesses statistical significance at the 1 percent level with a p-value <0.0001. With the full model, LossProj demonstrates statistical significance at the 1 percent level with a p-value <0.0001. The adjusted R-square increases from 0.0039 in the simple model to 0.691 in the full model demonstrating that the model captures nearly 70 percent of the variation in the dependent variable, spread.

Separating the sample pre and post subsamples for simple model, LossProj in the pre subsample has the wrong sign and no statistical significance (See Table 4B). Separating the sample pre and post subsamples for simple model, LossProj in the pre subsample has the wrong sign and no statistical significance (See Table 4B). This contrasts with the post subsample where LossProj has the expected sign and is statistically significant with a p-value of 0.026 (See Table 4C). With the full model, including control variables, LossProj in the pre subsample has the expected sign but is not statistically significant. This contrasts the full model post subsample with LossProj having the expected sign statistically significant at the 1 percent level. These results suggest that during the pre SFAS 140 period where the LossProj disclosure was provided on a voluntary basis, investors appeared to not assign importance to the disclosure in determining the yield spreads they demanded of ABS issuers. However, post SFAS 140, the LossProj disclosure does appear to be relevant to investors in assessing risk and influenced the yield spreads they demanded

Before examining the results further, we will provide some additional information on credit enhancement. The choice of which credit enhancement mechanism is employed in a given ABS issue will be driven by the projected quality of the underlying asset pool. For asset pools with high quality well performing underlying assets, internal credit enhancement mechanisms will be sufficient. However, if the underlying asset pool is perceived as not being sufficiently high quality, i.e., The ability of the underlying assets to generate adequate cash flows to make timely payments of principal and interest to investors is questionable, investors may require that external credit enhancement mechanisms for the ABS issue.

The distribution of the types of credit enhancement in the partitioned pre and post subsamples is informative. In the pre subsample, internally enhanced issues made up 69 percent of issues and externally enhanced issues were 31 percent. In the post subsample the internally enhanced proportion increases to 99 percent. The dramatic 43 percent increase in internally enhanced issues occurred while the mean projected losses increased a mere 1.2 percent in the post subsample. To examine how enhancement impacts spread, we use an OLS regression model with an enhancement variable [enhance] and interact it with the LossProj variable (see Table 4C). In the basic model with interactions both pre and post subsamples the Enhance-LossProj interaction term was not statistically significant. However, in the post subsample full model, the enhance variable has a t-statistic of 3.00 which is statistically significant at the 1 percent level (see Table 4C). This suggests, as

Table 3

Section A: Chow Test Results				Section B: Difference of Means (Univariate)				
	F-Value	P-Value			Mean Spread (Pre)	Mean Spread (Post)	T-Statistic	P-Value
Pre versus Post	13.48	<< 0.0001		Credit Cards	0.1537	-1.0338	10.7863	<< 0.0001
				Credit Cards**	0.6671	0.2491	2.2464	0.0159
				AAA Bonds	1.5171	1.8520	-9.4009	<< 0.0001
				** Floating rate coupon issues removed from sample.				

Table 4 A: Pre and post combined analysis

	Basic Model 1	Basic Model + Period	Basic Model + Period + Interaction	Basic Model + Period + Interaction	Full Model w/ Controls	Full Model w/ Controls + Interaction
Intercept	-0.92110**	-0.19619	0.24141	-0.20318	-0.10	0.34821
	(-3.11)	(-0.75)	(0.75)	(-0.75)	(-0.22)	(0.69)
LossProj	0.07043	0.05946	-0.01490***	0.05814	0.14	0.05599
	(1.43)	(1.42)	(-0.28)	(1.35)	(4.58)	(1.04)
Period		-1.18323***	-2.32888***	-1.18996***	0.28419	-4.47002***
		(-10.13)	(-4.54)	(-9.31)	(1.05)	(-3.78)
YldSlope					-0.67194	-0.73857***
					(-7.06)	(-8.11)
Princpl					0.00031**	0.00037**
					(1.98)	(2.48)
FxFloat					1.17036***	1.15857***
					(12.57)	(13.13)
Maturity					0.10215***	0.11043***
					(5.31)	(6.00)
Rating					-0.38972***	-0.38773***
					(-7.48)	(-7.85)
Enhance					0.05716	0.07828
					(0.45)	(0.18)
Bspread					0.57775***	0.61383***
					(4.30)	(4.80)
Enhance*LossProj				0.00374		-0.01702
				(0.13)		(-0.25)
LossProj*Period			0.19617**			0.35999***
			(2.29)			(5.25)
Enhance*Period						2.85570***
						(3.14)
N	265	265	265	265	265	265
Adj R-Sq	0.0039	0.2816	0.2931	0.2789	0.6912	0.7241

The sample consists of 265 separate ABS issues, 117 (before) and 148 (after). The dependent variable is Spread. LossProj is projected losses. YldSlope is yield slope. Princpl is principle amount of the issue. FxFlt is a dichotomous variable 1=fixed coupon, 0=floating coupon. Maturity is the maturity of the issue. Ratings is a categorical variable credit ratings 1=BBB, 2=A, 3=AA, 4=AAA. Enhance is credit enhancement variable 1=internal, 0=external. Period is dichotomous variable 1=before, 0=after. Bspread is the spread to treasuries of nonsecuritization bonds. ***, **, * represent significance at the 1%, 5% and 10% levels respectively.

Table 4B: Pre SFAS 140 analysis

	Basic Model 1	Basic Model + Interaction	Full Model w/ Controls	Full Model w/ Controls + Interaction
Intercept	0.24141	0.28696	-1.53863***	-1.60177***
	(1.09)	(1.27)	(-5.55)	(-5.28)
LossProj	-0.01490	-0.00880	0.02088	0.03033
	(-0.41)	(-0.24)	(1.40)	(1.30)
YldSlope			-0.56085***	-0.56457***
			(-8.57)	(-8.55)
Princpl			0.000081	0.000083
			(0.65)	(0.66)
FxFloat			0.85266***	0.85223***
			(15.18)	(15.12)
Maturity			0.04717***	0.04807
			(3.67)	(3.70)
Rating			-0.15490***	-0.15659***
			(-3.94)	(-3.95)
Enhance			-0.06148	0.03157
			(-1.19)	(0.17)
Bspread			1.55034***	1.55627***
			(15.39)	(15.31)
Enhance*LossProj		-0.02065		-0.01541
		(-1.00)		(-0.53)
N	117	117	117	117
Adj R-Sq	-0.0072	-0.0073	0.8552	0.8543

The sample consists of 117 separate (before) ABS issues. The dependent variable is Spread. LossProj is projected losses. WAL is weighted-average-life. YldSlope is yield slope. Princpl is principle amount of the issue. FxFlt is a dichotomous variable 1=fixed coupon, 0=floating coupon. Maturity is the maturity of the issue. Ratings is a categorical variable credit ratings 1=BBB, 2=A, 3=AA, 4=AAA, . Enhance is credit enhancement a dichotomous variable 1=internal, 0=external. Period is dichotomous variable 1=before, 0=after. Bspread is the spread to treasuries of nonsecuritization bonds. ***, **, * represent significance at the 1%, 5% and 10% levels respectively.

Table 4C: Post SFAS 140 analysis

	Basic Model 1	Basic Model + Interaction	Full Model w/ Controls
Intercept	-2.08747***	-2.59475***	-2.31345*
	(-4.39)	(-4.59)	(-1.84)
LossProj	0.18127	0.10880	0.37405***
	(2.26)**	(1.19)	(6.26)
YldSlope			-0.74454***
			(-6.08)
Princpl			0.00033*
			(1.73)
FxFloat			1.65916***
			(12.50)
Maturity			0.11678***
			(4.38)
Rating			-0.48819***
			(-7.53)
Enhance			2.38924***
			(3.00)
Bspread			0.20527
			(1.15)
Enhance*LossProj		0.16232	
		(1.64)	
N	148	148	148
Adj R-Sq	0.0271	0.0383	0.6851

The sample consists of 148 separate (after) ABS issues. The dependent variable is Spread. LossProj is projected losses. WAL is weighted-average-life. YldSlope is yield slope. Princpl is principle amount of the issue. FxFlt is a dichotomous variable 1=fixed coupon, 0=floating coupon. Maturity is the maturity of the issue. Ratings is a categorical variable credit ratings 1=BBB, 2=A, 3=AA, 4=AAA. Enhance is credit enhancement a dichotomous variable 1=internal, 0=external. Period is dichotomous variable 1=before, 0=after. Bspread is the spread to treasuries of nonsecuritization bonds. ***, **, * represent significance at the 1%, 5% and 10% levels respectively.

anticipated, that credit enhancement for credit card receivable ABS issues has a strong association with yield spreads. Noting the reduction in yield spreads post SFAS 140, this suggests that providing more information about the underlying asset pool with the SFAS 140 disclosures, reducing information asymmetry, investors were better able to assess underlying asset pool risk and a much higher proportion of internally enhanced issues were successfully brought to market.

Conclusions

In a securities underwriting process, the purpose of disclosures is to provide investors sufficient information to evaluate all of the attendant risks of a given transaction. The results suggest that the SFAS 140 disclosures are, in part, responsible for a statistically significant reduction in the mean launch spread of credit card receivable ABS transactions. There is some support for the notion that providing additional information about the securitization issue's underlying asset pool reduces the need for external credit enhancement of credit card ABS issues. The mixed results with regard to the relationship between credit enhancement type, projected losses and spread warrants further investigation in future research efforts. Better understanding the interplay between and relationship of type of credit enhancement employed and risk of a given securitization issue or transaction would be of interest to researchers and practitioners focused on securitization structuring questions. We expect that our study will be of interest to accounting and financial professionals and researchers involved in disclosure related studies. Future research directions could examine whether accounting disclosures have any predictive value with MBS and ABS issues. Additionally, we are intending to study whether accounting disclosures are useful in predicting credit rating downgrades and defaults of MBS and ABS. This would be particularly useful to accounting and finance professionals as well as academic researchers**.**

References

Albertazzi, U., Eramo, G., Gambacorta, L., and Salleo, C. (2015). 'Asymmetric information in securitization: An empirical assessment', *Journal of Monetary Economics*, Vol. 71, pp.33-49.

Gurtler, M. and Hibbeln, M.(2013). 'Do investors consider asymmetric information in pricing securitizations?' Working Paper.

He, J., Qian, J. and Strahan, P.(2012). **'**Are all ratings Created equal? The impact of issuer size on the pricing of mortgage-backed securities', *Journal of Finance,* Vol. 67, No. 6, pp. 2097-2137

Jackson, H. (2010). 'Loan-level disclosure in securitization transactions: a problem with three dimensions', Working Paper.

Mahlman, T. (2011). 'Did investors outsource their risk analysis to rating agencies? Evidence from ABS-CDOs', Working Paper.

Securities Industry and Financial Markets Association. www.sifma.org

Tian, X. and Zhang, H. (2017). 'Impact of FAS 166/167 on the securitization of credit card loans'. Working Paper.

Vink, D. and Fabozzi, F. (2009). 'Non-US asset-backed securities: spread determinants and over-reliance on credit ratings', Yale ICF Working Paper No. 09-13, Yale University.

Vink, D. and Thibeault, A. (2008). 'ABS, MBS and CDO compared: an empirical analysis', Working Paper.

Wharton, A and Sharma, H. (2016). 'Analysis of credit cards, automobile loans and mortgage backed securities: primary market risk perceptions', *Journal of International Finance and Economics*, Vol. 16, No. 3, pp. 85-96.

Wharton, A, Sharma, H. and Nguyen, S. (2018). 'Impact of accounting disclosure standards on mortgage-backed securities risk(s) with a focus on SFAS 140', *Journal of International Financial Studies,* Vol. 18, No. 2, pp. 75-85.

Wharton, A., Sharma, H. and Nguyen, S. (2019). 'Investors' risk perception of automobile ABS after implementation of major accounting disclosure requirements', Working Paper. (Under review Global Journal of Accounting and Finance)