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**Deutsche Bank****November 7, 2002**

# Credit Card ABS

## An update on an asset class that's taken its lumps

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- Between general FFIEC proposed guidance and both formal and informal issuer-specific agreements, the credit card industry has been under a regulatory microscope.
- The effects of this scrutiny have combined with concerns about credit quality and growth opportunities to result in substantial spread tiering between top-tier credit card issuers and more distressed names. While top-tier issuers continue to have unfettered access to the capital markets, others are seeing their paper trade at unprecedented widths.
- The last 6 to 12 months has also been a period of very real concern about early amortization. We've seen one trust (NextCard) amortize early, shortly after its seller servicer was taken over by the FDIC as receiver. We have also seen a handful of transactions from otherwise healthy trusts come close to amortizing early, due to high fixed-rate coupons.
- In this report, we look at these issues as part of our discussion of the current landscape for credit card ABS.

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## Market Update

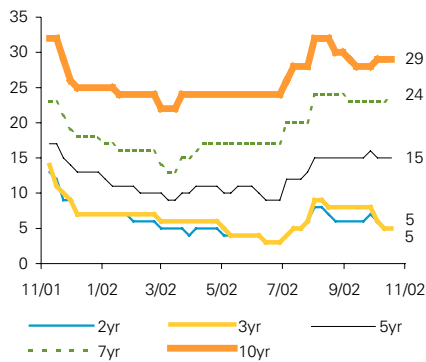
Between heightened regulatory activity, early amortization (both feared and actual) and negative ratings actions, credit card ABS spreads widened significantly at the end of the summer, and tiering by servicer and rating has continued to be pronounced. If there is a common thread to the last several months, it is a heightened sense of the importance of the servicer in credit card ABS. The relative strength of specific servicers has had growing implications for rating agency modeling assumptions, deal performance and headline/trading risk, all points that we will examine in this review of recent events in the credit card ABS market. We also feature two specific cases: one of early amortization delayed (NextCard), and the other an example of early amortization “close calls,” in spite of healthy trust performance. We begin with a quick update on the market as it stands today.

### Credit card ABS technicals heading into the end of the year

#### Slower issuance and greater than normal spread volatility

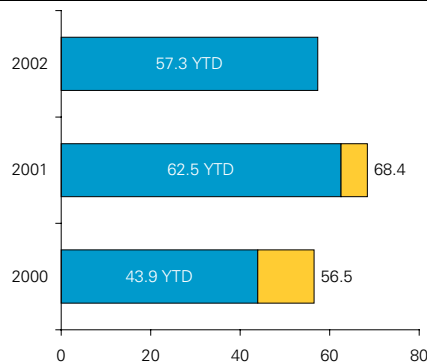
The charts below show spreads that have at last plateaued after a period of widening, with new issue volume that continues to lag last year’s at this point.

**Figure 1: Credit card fixed-rate spreads to swaps (bp)**



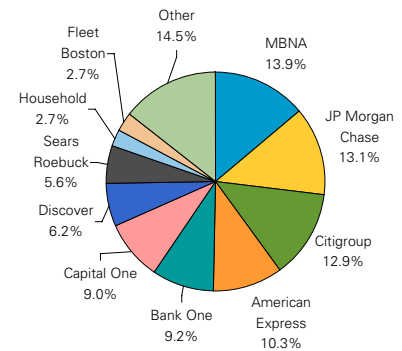
Source: Deutsche Bank  
Note: All charts show data for US deals only

**Figure 2: Public/144A credit card issuance (YTD, US\$bn)**



Source: Thomson Financial Securities Data

**Figure 3: Credit card issuers (YTD)**



Source: Thomson Financial Securities Data

As our chart of top-tier<sup>1</sup> triple-A credit card spreads shows above, credit card spreads started widening in the middle of July 2002, and continued to widen for most of August, and are currently up 6 bp from their year-to-date low (5-year fixed-rate) of 9 bp. While this third quarter widening was significant, what occurred for the top-tier names paled in comparison to the widening seen for certain other issuers.

#### Tiering both by issuer and by rating is at an all-time high

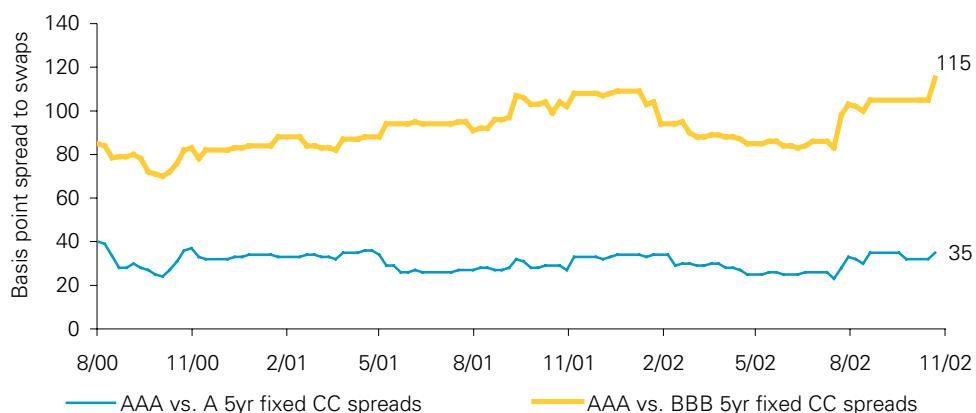
The widening of distressed versus prime credit card spreads seen during the past couple of months has dwarfed anything previously seen in the history of the credit card ABS market. We estimate that the difference between triple-A rated top-tier and nonprime/distressed spreads (for 3-years) have widened to about 100 to 120 bp; this

<sup>1</sup> “Top-tier” spreads are, for any given period, secondary market spreads for whichever issuers are considered to be the most liquid, on-the-run issuer in the sector at that time. For credit cards this typically includes spreads for the credit card ABS of MBNA and Citibank, for example.

difference was at a more historically normal 30 to 35 bp at the beginning of July. Specific comparisons to periods such as the fall of 1998 Russian Debt/LTCM liquidity crisis are difficult because distressed names tend not to trade or issue during those times. But, anecdotally, we believe that the current period's tiering is multiples more extreme than anything seen previously. After stabilizing by the beginning of September, a strong ABS market-wide flight-to-quality sentiment has more recently caused this differential to gap out again.

Credit card trading levels have also varied significantly by ABS rating. The chart below demonstrates growing pick-ups for going down the credit curve. The pick-up for triple-B versus triple-A credit card ABS was also relatively high toward the end of 2001. At that time, the supply of triple-B credit card ABS was higher than historical levels due to the increased adoption of "de-linked" credit card structures, which facilitate the issuance of larger subordinate classes.

**Figure 4: The credit curve (for top-tier) has steepened in recent months**



Source: Deutsche Bank

A simple reversion-to-the-mean argument would imply that spreads for some of the distressed names, or the lower-rated ABS, should come in. However, we think several factors will limit both the speed and magnitude of such a reversion. On the following pages, we discuss the current (but evolving) regulatory landscape. We believe regulatory issues will continue to present significant headline risk for credit card ABS, and that even those credit card issuers who have had specific dialogues with regulators are still not necessarily "out of the woods." In addition, slower growth in many portfolios will cause percentage charge-offs to rise, possibly fueling credit concerns. Lastly, traditional fourth quarter conservatism, whereby portfolio managers often seek to "lock in" year-to-date performance, does not augur well for spread tightening in the short term.

## Recent Regulatory Activity

### **Renewed focus from regulators has emphasized industry accounting practices**

Regulatory risk has emerged as the Achilles' heel of the credit card sector. Unexpectedly high losses in certain portfolios, and wide variations in industry accounting and servicing practices have attracted unprecedented attention from regulators. Starting with Provident and NextCard almost a year ago, regulators have begun to require higher capital reserves, particularly against subprime receivables. (The regulators have defined "subprime" as accounts with a FICO score of 660 or lower.) At the end of 2001 Provident began to work under a new capital plan (as required by regulators) that included increased risk weightings for subprime assets. NextCard was ultimately unable to meet the more stringent regulatory requirements, and went into receivership in early February 2002.

Metris and Capital One have been the issuers to most recently attract scrutiny, largely because of their subprime exposures.<sup>2</sup> On July 22, 2002, the FFIEC issued draft guidance, which include proposed requirements for the entire industry in four broad areas:

- **Credit line management** – Lenders must set and manage open exposure with greater regard to each borrower's ability to repay. This includes the consideration of all lines outstanding from the lender when assessing whether to extend any new lines or raise limits on existing accounts.
- **Over-limit practices** – Lenders must use restraint in allowing credit limit overrides. This guideline specifically emphasizes controlled over-limit practices *vis-à-vis* subprime accounts.
- **Workout and forbearance practices** – Lenders must structure any workout repayment plans for accounts that have been charged-off to make ultimate payment achievable (payable within 48 months). The guidance suggests that some lenders may need to limit post-charge-off interest and fees, in order to make repayment more achievable for borrowers. The repayment period must be short enough to effect a reduction in principal, and prevent "negative amortization."<sup>3</sup> Any settlement arrangements whereby a portion of the principal balance is forgiven must include the recognition of the forgiven portion as a loss, as soon as that is determined.
- **Income recognition and loss allowance practices** – Lenders are to ensure that any fees and finance charges associated with delinquent accounts that aren't deemed collectible are accounted for accordingly. The guidance also urges lenders to include, in reserves, allowances not just for delinquent accounts expected to charge-off, but for current accounts that could charge-off, based on historic experience.

The FFIEC gave the industry until September 23, 2002 to give final comments; final guidelines are expected to be issued over the next several weeks.

<sup>2</sup> For more on these specific examples, please see our July 19, 2002 issue of the *Asset-Backed Barometer*.

<sup>3</sup> "Negative amortization" occurs when the monthly cardholder payment does not cover the fees and finance charges owed; new fees and/or finance charges accrue, resulting in a higher balance than before the payment was made.

***Clarification on recovery accounting should not impact trust cash flows***

One of the areas of focus in the FFIEC's guidance relates to accounting for recoveries of charged-off receivables. Regulators have expressed concern that some lenders are showing a mismatch between amounts booked to allowances for loan losses (because they're deemed uncollectible), and subsequent credits to the allowances once recoveries on the related accounts come in. Specifically, if a lender only reserves against a principal charge-off amount, but subsequently recovers not only the principal, but also interest and fees related to the account, a lender can't credit the allowance for the larger total amount, as that would lead to understated net charge-offs (i.e. charge-offs net of recoveries). However, if lenders do reserve for both principal and finance charges/fees, then it is acceptable to reverse out recoveries of both components.

We don't expect this clarification on recovery accounting to have any effect on ABS master trust accounting. With respect to securitizations, recovery practices vary widely from trust to trust. If a trust benefits from recoveries (most, but not all, do), recoveries come in through collections. For reporting purposes, this recovery amount can be presented in one of two ways. Recoveries can be used to reduce charge-offs—in this case a net-charge-off rate would be reported, and the reported yield would not be affected. Alternatively, recoveries could be reported as an additional source of yield. Under the latter method, yield would be higher, as would reported charge-offs, than would be the case if recoveries were accounted for as a reduction to charge-offs. Note that, in either case, excess spread is the same.

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## Credit Performance

***Credit card loss rates probably have not yet peaked, while excess spread remains healthy***

In spite of the cyclical weakness in the economy, performance of most credit card ABS trusts has held up relatively well. The September Fitch Ratings Credit Card Charge-off Index data showed an index loss rate of 5.7%, down 22 bp from August. However, September notwithstanding, losses are still approximately 80 bp above their low of 4.9% seen in September 2000. Delinquencies as measured by the Fitch index were flat from the previous month, at 3.19%. We believe the recent decline in losses is short term, and that a true peak for this loss cycle is not likely to be reached until early 2003. One reason is the timing of the current economic cycle. DB economists are projecting a peak in unemployment to occur sometime in Q4 2002, at 6.1%. Figure 5 shows credit card industry charge-offs against both the US unemployment rate and the 6-month lagged US unemployment rate (credit card charge-offs typically lag unemployment). The forecasted increase in the unemployment rate gives us reason to believe that card losses are also likely to rise in the coming months.

**Figure 5: Charge-offs track the lagged unemployment rate closely**

\* DB Q4 02 Forecast

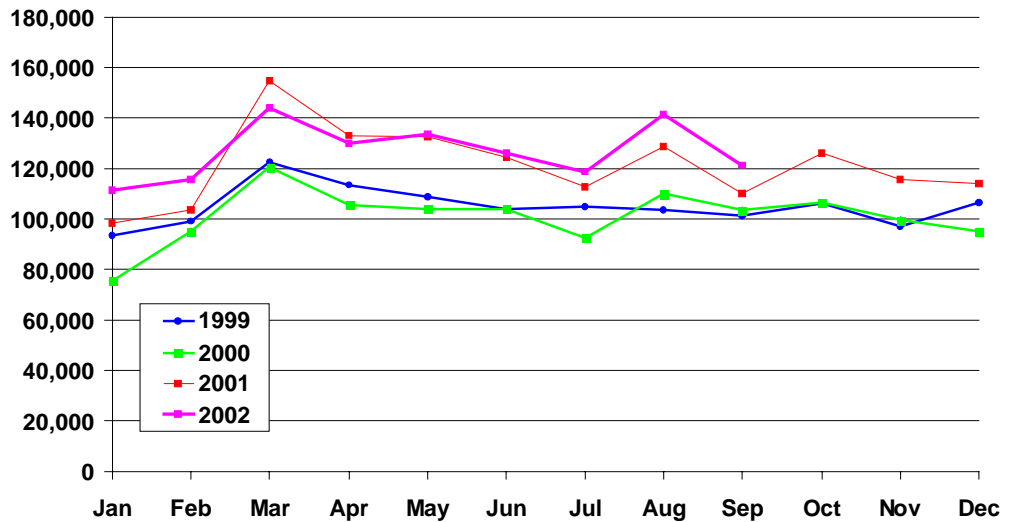
Source: Fitch, US Department of Labor

***Gone for now (but not forgotten), we don't expect bankruptcy reform to pass in 2002***

Another concern is bankruptcy reform. The current proposed legislation would require a "means test," which would have the effect of allowing fewer people to qualify for Chapter 7 (a liquidation), and more to qualify for Chapter 13 (a reorganization, under which the borrower repays at least a portion of his debts).<sup>4</sup> It appears that the bankruptcy bill had been taken off the 2002 calendar, mired in a tangential provision of the bill that relates to the abortion debate. While that issue hasn't yet been resolved, there is now some talk of putting the bill back on the calendar for a post-election "lame duck" session. If reform were passed, we would expect a short-term spike in bankruptcies, as filers rush to beat the effective date of any final bankruptcy law. We saw a 20+% spike in bankruptcies in the beginning of 2001, the last time bankruptcy legislation appeared close to passing. Over the long term, the effect is less clear. Credit card lenders would hope to see a big decline in loss rates if more borrowers are required to at least make an effort to pay their credit card debt. However, a recent study by Economy.com that compared charge-off rates between states with a high percentage of Chapter 13 filings versus Chapter 7 filings (and which was adjusted for state-specific demographic factors) would seem to indicate very little long-term effect from legislation meant to shift filers to Chapter 13. In the meantime, bankruptcy filings year-to-date are up only modestly, reflecting the recession.

<sup>4</sup> For a discussion US Consumer Bankruptcy Law, please see "Chapter and Verse" on US Consumer Bankruptcies, April 10, 2001.

**Figure 6: Bankruptcy filings are up 3.9% year to date**



3.9% YTD Annual Growth  
 2001 Year-to-date Filings (->9/30/2001): 1,098,420  
 2002 Year-to-date Filings (->9/30/2002): 1,141,443

Source: Lundquist Consulting, Inc.

**While losses have increased, credit enhancement provides substantial protection**

Of course we cannot look at loss rates simply in a vacuum, but also should look at them relative to credit enhancement. In the table that follows we show the most recent loss rates for selected active credit card ABS (all for the September 2002 monthly period), as well as the triple-A floating-rate credit enhancement percentage required for each respective issuer's most recent unwrapped floating-rate transaction. The last column shows credit enhancement as a multiple of losses. The credit card issuers are ranked by credit card loss rates relative to enhancement, from highest multiple to lowest multiple. Rather than focus exclusively on loss performance, attention should also be paid to available enhancement, as well as other variables such as excess spread, payment rate, performance volatility and servicer strength.



**Figure 7: Credit enhancement for triple-A floaters, ranked as a multiple of losses**

Issuer	Bloomberg Ticker	Pricing Date (Most Recent Triple-A Floater)	AAA Floating-Rate Credit Enhancement <sup>1</sup>	3 mos. Avg. Loss Rate	Date for Loss Rate	Multiple of Losses
Circuit City Credit Card Master Trust <sup>2</sup>	CIRMT	4/24/2002	27.50%	5.36%	Sep-02	5.1
Saks Credit Card Master Trust <sup>2</sup>	SCMT	7/11/2001	26.00%	5.26%	Sep-02	4.9
Nationsbank Credit Card Master Trust	NBCMT	6/4/1996	16.00%	3.96%	Sep-02	4.0
Target Credit Card Master Trust <sup>2</sup>	TGT	6/25/2002	25.00%	7.50%	Sep-02	3.3
MBNA Credit Card Master Note Trust	MBNAS	7/16/2002	17.65%	5.37%	Sep-02	3.3
Capital One Multi-Asset Execution Trust	COMET	10/4/2002	18.75%	5.79%	Sep-02	3.2
Providian Master Trust	PNBMT	11/9/2000	22.25%	7.05%	Sep-02	3.2
Chase Credit Card Master Trust	CHAMT	11/5/2002	16.00%	5.10%	Sep-02	3.1
Wachovia Credit Card Master Trust	WACMT	7/25/2000	15.00%	4.92%	Sep-02	3.0
American Express Credit Account Master Trust	AMXCA	8/8/2002	17.50%	6.14%	Sep-02	2.8
First USA Credit Card Master Trust	FUSAM	5/3/2001	16.00%	5.71%	Sep-02	2.8
Fleet Credit Card Master Trust	FCCMT	10/22/2002	17.50%	6.26%	Sep-02	2.8
Bank One Issuance Trust	BOIT	11/1/2002	14.50%	5.21%	Sep-02	2.8
World Financial Network Credit Card Master Trust <sup>2</sup>	WFNMT	10/30/2002	24.50%	9.06%	Sep-02	2.7
Citibank Credit Card Issuance Trust	CCCIT	10/28/2002	13.96%	5.20%	Sep-02	2.7
Sears Credit Account Master Trust	SCAMT	9/4/2002	20.50%	8.01%	Sep-02	2.6
Charming Shoppes Master Trust <sup>2</sup>	CSMT	7/16/1999	34.50%	13.76%	Sep-02	2.5
First Chicago Master Trust II	FCMT2	7/28/1999	13.50%	5.64%	Sep-02	2.4
BA Master Credit Card Trust	BAMT	5/30/2001	13.00%	6.44%	Sep-02	2.0
Metris Master Trust	MMT	5/23/2002	32.50%	16.39%	Sep-02	2.0
Discover Card Master Trust I	DCMT	10/8/2002	12.50%	6.63%	Sep-02	1.9
American Express Master Trust (charge card)	AMXMT	6/11/2002	7.50%	4.15%	Sep-02	1.8
People's Bank Credit Card Master Trust	PBCMT	9/22/1999	15.50%	10.08%	Sep-02	1.5

1. As required for each issuer's most recent unwrapped floating-rate transaction

2. Credit enhancement is also sized to cover dilutions (non-credit reductions of principle)

Source: Moody's Investors Service, Individual transaction prospectuses

Another issue that has grabbed the attention of investors is high-growth portfolios, and how such growth might obscure the true credit performance of a portfolio. We have looked at the top ten credit card issuers, and lagged their losses by 18 and 24 months for prime issuers, and 12 and 18 months for subprime issuers,<sup>5</sup> as shown in the following table (Figure 8). While current 3-month average loss rates range from between 5.13% and 15.87% (column a), lagging that loss rate by the estimated number of months it takes losses to peak results in adjusted loss rates (column f) that are higher for any portfolio that has experienced growth.

<sup>5</sup> Because Capital One has a well-publicized "barbell" strategy that includes originations of both subprime and superprime receivables, we've used a weighted average of these two timing lags to adjust that portfolio.  $((9 \text{ months}) * (40\% \text{ of portfolio}) + (19 \text{ months}) * (60\% \text{ of portfolio})) = 15 \text{ months}$ , and  $((12 \text{ months}) * (40\% \text{ of portfolio}) + (24 \text{ months}) * (60\% \text{ of portfolio})) = 19.2 \text{ (rounded to 19) months}$ .

**Figure 8: Seasoning also significantly impacts the reported loss rate**

Issuer	(a) 3 mo. avg. losses (Sept 2002)	(b) Seasoning	(c) Estimated loss peak	(d) Adjusted 3 mo. avg. losses	(e) Estimated loss peak	(f) Adjusted 3-mo. avg. losses	Difference between column (f) loss rate and column (a) loss rate	Previous column, as a % of current 3-mo. avg. loss rate
MBNA Credit Card Master Note Trust	5.37%	75 mos.	18 mos.	6.32%	24 mos.	<b>6.59%</b>	122 bp	22.77%
Chase Credit Card Master Trust	5.10%	87 mos.	18 mos.	7.83%	24 mos.	<b>7.50%</b>	240 bp	46.97%
Citibank Credit Card Issuance Trust	5.20%	70.15% greater than 48 mos.	18 mos.	6.38%	24 mos.	<b>6.45%</b>	125 bp	24.04%
American Express Credit Account Master Trust	6.14%	46.7% greater than 71 mos.	18 mos.	7.87%	24 mos.	<b>8.98%</b>	284 bp	46.27%
Capital One Master Trust/Capital One Multi-Asset Execution Trust	5.79%	34 mos.	15 mos.	7.77%	19 mos.	<b>9.28%</b>	349 bp	60.34%
Bank One Issuance Trust	5.21%	67 mos.	18 mos.	4.55%	24 mos.	<b>4.29%</b>	-92 bp	-17.69%
Sears Credit Account Master Trust	8.01%	64% greater than 5 years	18 mos.	10.61%	24 mos.	<b>11.68%</b>	367 bp	45.84%
Discover Card Master Trust I	6.63%	66.9% greater than 36 mos.	18 mos.	6.77%	24 mos.	<b>6.70%</b>	7 bp	1.06%
Metris Master Trust	16.39%	50 mos.	12 mos.	21.15%	18 mos.	<b>25.60%</b>	921 bp	56.19%
Providian Master Trust	7.05%	42.68 mos.	12 mos.	5.94%	18 mos.	<b>5.70%</b>	-135 bp	-19.15%

Source: Prospectuses, Deutsche Bank, Moody's Investors Service

**And lower funding costs have helped maintain excess spread**

While losses may tick up a little more this year, healthy excess spread levels (the most recent Fitch index excess spread level is 6.4%, versus a 5-year average of 5.4%) should continue to provide ample cushion. The current consensus is that weak-to-mixed economic news should keep the Fed from raising rates this year, and even possibly cause a further reduction. This would keep funding costs low, and help maintain the strong excess spread trend for at least the next few months. If the rate outlook were to change however, excess spread could be pressured, until industry loss rates begin to decline and/or lenders were able to reprice their accounts in response to rising rates.

**Credit card early amortization, both feared and actual, emerged this past summer**

We now turn to one of the "dirty words" in credit card ABS—early amortization. Early amortization has surfaced as a big issue in two different contexts this year. In one scenario we had an underperforming trust that many assumed (and hoped) would begin to amortize earlier than it actually did (NextCard). The other scenario relates to a handful of trusts that generally demonstrated good performance but that some investors *feared* would amortize as older, fixed-rate deals came close to breaching their base rate triggers. These transactions (which include PNBMT 2000-1, CHEMT 1996-3 and CHAMT 1999-3) were issued several years ago in a higher rate environment, and did not include a swap in the trust. As a result, excess spread levels for these three series have all slipped to under 75 bp at some point over the past several months, while most other series (either floating-rate or swapped within the trust) from these same trusts have healthy excess spread. We'll discuss these two situations in turn as different case studies.

## Early Amortization – Actual

### NextCard “early” amortizes, later than many expected

The early amortization that *did* occur this summer was that of the NextCard Credit Card Master Note Trust. As we wrote in the August 2002, *Securitization Monthly*, the NextCard trust hit a base rate early amortization trigger<sup>6</sup> in July. However, there was concern over early amortization much earlier for NextCard, back in February 2002. The FDIC took over NextCard as receiver in February 2002, after the OCC determined that the bank would be unable to satisfy capital requirements. Many assumed that would prompt an early amortization, as provided for in the transaction documents. However, at that time the FDIC advised the trustee (Bank of New York) that the particular trigger relating to insolvency was “unenforceable” under the applicable statutes, and the trust continued to revolve.

**NextBank insolvency highlights the reality of regulatory risk...**

The NextCard situation is interesting on two fronts. First, the expected early amortization in February did not occur. The regulators made the determination that the insolvency-related early amortization trigger was not enforceable, reminding us of the power that regulatory entities have. Second, in July, the FDIC closed the “open-to-buy” on accounts, an action that was not anticipated by rating agencies or investors.

The FDIC provided some insight behind its decision to declare the insolvency-based early amortization trigger unenforceable in February, referencing its ultimate responsibility to the receivership estate’s creditors, and not trust ABS investors. The FDIC’s role required making some judgment calls about the pace of asset credit deterioration, the salability of the assets and the implications of funding new receivables. When NextBank went into receivership, it was in the process of trying to sell the NextCard accounts, a process that the FDIC continued as receiver. In February the FDIC believed that it had a better chance of realizing a higher ultimate liquidation amount through a sale if the trust was still revolving. Furthermore, in February the FDIC was also still in the process of lining up a successor servicer for the trust who would accept the 2% servicing fee provided for in the documents. (First National Bank of Omaha became the successor servicer, accepting that rate, in August 2002.) However, by the time the base rate early amortization trigger was hit, no potential buyer had been found, performance had deteriorated and the FDIC determined that it was better to limit losses and let the trust unwind. The FDIC has also been very clear that it would take the same action (invalidating an early amortization event) in the future if in its estimation it would be in the best interest of *receivership* creditors. While this risk is disclosed in credit card ABS prospectuses (including those for the NextCard deals), we believe market participants will weigh this risk much more heavily in credit card ABS going forward. As a result, the financial condition of the seller servicer will assume greater importance in the pricing of credit card ABS.

According to information in the servicing reports and from the rating agencies, over the five months between February and July 2002, losses in the NextCard trust increased from about 12% to 16%, enough to cause excess spread to go negative. The other performance variables appear to have been stable over that period, with

<sup>6</sup> The base rate is generally defined to be the sum of the monthly coupon cost (annualized) plus annual servicing fee. The base rate trigger (also known as the excess spread trigger) is defined to be the portfolio yield, less losses, less the base rate.

yield in the 18% to 20% range, and the monthly payment rate in the 10% to 12% range. But, by entering early amortization after losses had increased substantially, investors were in an incrementally worse position. Since July, the combination of a bumpy servicing transfer (to First National Bank of Omaha), and the effects of a balance transfer program directed to NextCard holders whose lines were closed, make the task of forecasting performance through the rest of the deal paydown complex at best.

***...and calls "purchase rate" assumptions into question***

The second issue that the NextCard early amortization raises, that of "purchase rate" (monthly new purchases divided by principal outstandings), has implications for assumptions about future available credit card cash flow. After attempting and failing to find a purchaser for the NextCard accounts, the FDIC closed the accounts, just as the deals were going into early amortization in July. This step, too, was taken in an effort to preserve assets for the receivership creditors (i.e. the cash which otherwise would have been used to fund new credit card purchases). Because the credit cards therefore no longer had any utility, and couldn't be used for new purchases, the NextCard ABS entered early amortization with a 0% purchase rate, and *no* new receivables. New receivables generation is valuable to the trust because these receivables produce yield cash flow for use during the pay-out. However, it also takes assets to fund these new receivables, assets which in this case the FDIC wanted to preserve for the receivership estate rather than put at risk.

***No new receivables = no new yield cash flow for principal paydown***

The rating agencies have generally espoused the philosophy that, in an early amortization scenario, only a nominal level of new purchases are going to be generated on the credit cards. This is also an area where perceived servicer strength is a key determinant of what level of purchase rate to assume. Generally, higher purchase rates are assumed for higher-rated bank card servicers. For example, for a bank card issuer, the purchase rate assumption could vary from between 2% and 6%. For issuers of retail credit cards, however, a 0% purchase rate is typically assumed.<sup>7</sup> The rationale behind this bank card/retailer difference is the assumption that a Visa/MasterCard, unlike a retailer's card, would still have some level of utility, even if the servicer of the card goes away. Underlying such an assumption is the premise that the MC/Visa portfolio is assumed by an acquirer or back-up servicer, who would fund new purchases on the card (an assumption now called into question by the NextCard case). On the other hand, if a retailer files for Chapter 7 bankruptcy,<sup>8</sup> and stores are closed, the retail credit card becomes useless. Because of this, no purchase rate credit is given in the rating agency early amortization scenarios for retailers.

***Purchase rate affects both the amount of losses and the timing of paydown***

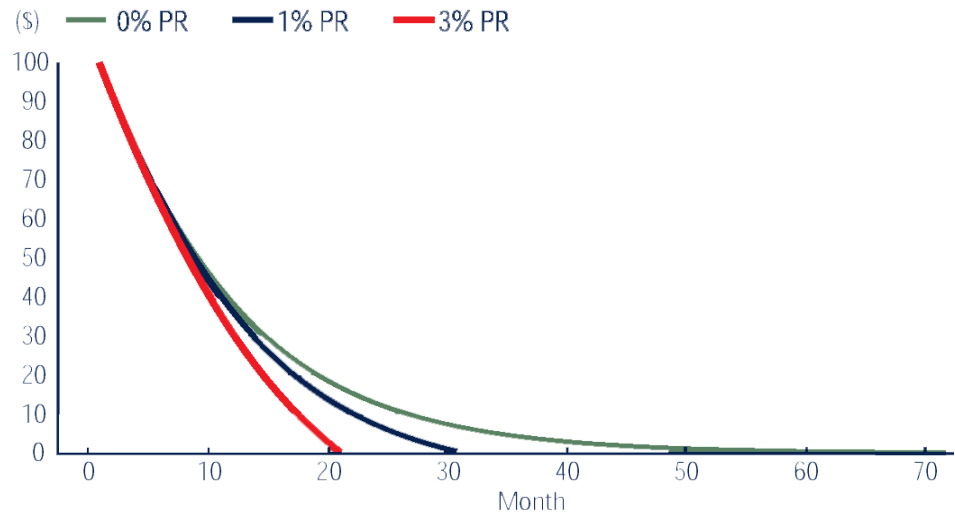
Together with payment rate, purchase rate has a significant effect on the sizing of credit enhancement, because it affects the size of the receivables base that is generating payments to pay out noteholders. In its "Credit Card Criteria" book, Standard & Poor's includes a diagram to demonstrate how assumptions about purchase rate can affect both the length of the pay-out period, as well as the ultimate credit enhancement requirement. Their generic scenario analysis assumes a total monthly payment rate of 8%, a fixed coupon of 7%, yield of 11% and peak losses of 20%. These performance levels are all consistent with a triple-A stress scenario for an average bank card portfolio. As Figure 9 demonstrates, a 0% purchase rate can

<sup>7</sup> We know of at least one exception to this. In the case of Sears, some positive purchase rate credit is assumed, in part due to the relatively large contribution of the credit business to the company, as well as the fact that an increasing portion of the business is comprised of Visa/MasterCard receivables.

<sup>8</sup> By contrast, if the retailer were to file Chapter 11, and were able to keep some stores open through a restructuring process, the private label card might have still have some utility.

have the effect of dramatically lengthening the pay-out period, given the stresses to those other variables.

**Figure 9: Principal repayment under various purchase rate assumptions**



PR = Purchase Rate, "Month" is month since early amortization begins

Source: Standard & Poor's

That same publication includes another chart (based on the same performance variables) which demonstrates how much more credit enhancement would be required to prevent write-downs under a 0% purchase rate assumption, as compared with a 3% assumption.

**Figure 10: The effect of purchase rates on enhancement levels ("MPR – Monthly Purchase Rate")**

Purchase rate	Months outstanding	Credit enhancement (%)	% difference from 3% MPR
3% MPR	21	8.25%	—
1% MPR	31	10.50%	27%
0% MPR	*	13.00%	58%

MPR = Monthly purchase rate

\*Asymptotic

Source: Standard & Poor's

**NextCard ABS investors will see payments significantly delayed as a result of early amortization delay**

The NextCard story is still developing. On the positive side, funding costs have not yet risen (which the rating agencies do assume occurs for stressing floating-rate deals). However, losses have increased, from 16% in July 2002 to 19.5% in September 2002, and we expect this trend to continue. It has been more difficult to put parameters around the payment rate and yield, due to the effects of a balance-transfer program that the FDIC arranged with two other credit card issuers. (S&P reported that this resulted in approximately \$35 million of payments that otherwise were unlikely to have come in so soon.)<sup>9</sup> Indeed it now appears that collections generated by the balance transfer promotion have all but dried up; for September,

<sup>9</sup> "NextCard Credit Card Master Note Trust Being Monitored During Amortization," September 27, 2002, Standard & Poor's.

the trust had a payment rate of 5.2%, less than half of the 11.6% rate seen in August. Reported yield was also much lower than in previous months, at 6.65%.

The fact that the NextCard early amortization was accompanied by insolvency has important implications for credit enhancement modeling. The rating agency credit enhancement models typically do not assume that the credit cards will be closed. Based on Figure 10, it is likely that the NextCard transactions would have required greater credit enhancement had ongoing utility not been assumed. There also are timing implications given the fact that the NextCard transaction went into early amortization five months later than many would have expected.

In light of the NextCard pay out, two rating agencies have published reports that question the purchase rate assumptions, particularly for regulated entities.<sup>10</sup> We assume that Moody's is similarly reviewing its purchase rate criteria. In addition to murmurings that purchase rate assumptions may need to change, we've also heard rating agencies question whether the standard 2% servicing fee structured into most credit card ABS is sufficient to attract a competent back-up servicer. While the FDIC was able to find a servicer for NextCard's portfolio at the 2% servicing rate, we've heard, anecdotally, that the 2% may actually be under market.

We have modeled two different pay-out scenarios for the NextCard trust. The first scenario models what actually occurred—the transaction hit an excess spread trigger in July 2002, and began to amortize at that point. The second scenario shows how investors would likely have received principal had the outstanding series begun to amortize in February 2002. This would have been an early amortization due to the insolvency trigger, rather than an excess spread trigger, and thus the deal would have benefited from positive excess spread for several months. Another critical difference is the fact that the FDIC may have allowed new purchases to be available for the trust up until July. In our February scenario, we assume a 2% monthly new purchase rate<sup>11</sup> from February 2002 to July 2002, at which point the FDIC closed down the credit lines. For the other variables, in both scenarios we relied on historical collateral performance as reported in servicer reports through September 2002, and then assumed the following collateral performance going forward:

**Figure 11: Performance assumptions for modeling the NextCard early amortization**

Variable	Level
Monthly Payment Rate	Deteriorates from 5.2% in September 2002 to 2% over four months; then stays at 2%
Yield (annualized)	Stable at 12% <sup>12</sup>
Charge-offs (annualized)	Increases to 30% over six months, from September 2002 level of 19.5%
LIBOR (for coupon cost)	Increases to 5.50% by February 2004

<sup>10</sup> "Fitch Comments on Regulatory Developments, Credit Card ABS Implications," August 8, 2002, Fitch; NextCard Credit Card Master Note Trust Being Monitored During Amortization," September 27, 2002, Standard & Poor's.

<sup>11</sup> 2% is much lower than the 8% to 10% actually seen in the trust in early 2002. We are being conservative with this variable to account for the uncertainty around whether the FDIC might have closed the lines in February, also, even though the financial picture was different.

<sup>12</sup> Although reported yield was much lower for the previous month, we believe that month was an anomaly, and that a higher, 12%, yield is a more likely assumption going forward.

Based on these assumptions we estimate that, had the NextCard transaction gone into early amortization in February, the Class As would have been paid in full in twenty months (by September 2003). By entering early amortization instead in July, 2002, when excess spread was negative and the purchase rate was zero, we estimate that the Class As will experience a slight loss of a principal (approximately 2%), and take 55 months to pay out (by January 2007). In the February scenario we believe that the Class Bs would also have ultimately been paid in full, but the more junior notes would experience significant loss of principal. However, in the July scenario, we anticipate that all classes under the Class As will experience significant loss of principal.

## CASE II

***A few high coupon series have come within "spitting distance" of early amortization***

Our second case study is one of the high fixed-rate transactions, the Providian Master Trust Series 2000-1. The Class A of this transaction (a 5-year) was issued in 2000 with a fixed coupon of 7.49%.<sup>13</sup> Today a 5-year fixed-rate credit card ABS would have a coupon of approximately 4%. The series' relatively high coupon pushed the 1-month excess spread for this series negative, down to -0.9% in August 2002, resulting in a 3-month average excess spread level of 0.62%. By comparison, Series 2000-2, a floater (also a 5-year) issued from the same trust, had 1-month excess spread of 4.95% in August, reflecting its much lower funding cost. Besides Series 2000-1, which totals \$468 million, the Providian Master Trust has two other high fixed-rate series outstanding, Series 1997-4 and Series 1999-2, each with 1-month excess spread of less than 1% in September 2002. The total amount outstanding of these three deals is \$1.6 billion, while the total trust size is approximately \$4.4 billion. Investors have reason to be concerned; top-tier high coupon fixed-rate credit card deals in general have been trading at premium dollar prices as high as 115. This particular Providian bond has been trading in the 103 to 106 range.

***Most fixed-rate series backed by floating-rate collateral incorporate swaps***

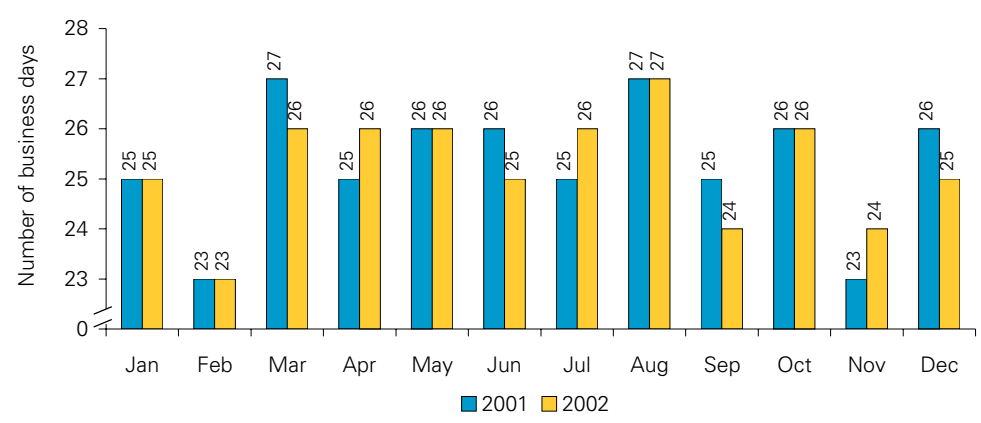
Not all fixed coupon credit card ABS issued when rates were higher have seen excess spread dip in response to falling rates. Most fixed-rate deals are structured with a fixed/floating-rate swap in the trust, in order to meet FASB requirements for hedge accounting. In these structures, the excess spread definitions include, as a source of yield, any payments from the swap counterparty. Since June 2000, FAS 133 has required that obligations issued from credit card ABS trusts have the same fixed/floating character as the underlying assets, in order to avoid having an on-balance sheet asset/liability. Issuers with floating-rate assets therefore usually issue fixed-rate transactions only when combined with a swap, in the trust. The swap becomes an incremental transaction cost (ranges from between 2 bp and 8 bp). This accounting requirement and related hedging cost in part explains why the volume of credit card fixed-rate paper has declined so sharply in recent years. For example, there were not any fixed-rate deals (swapped or unswapped) issued from the Providian trust after FAS 133 became effective. Among other issuers, MBNA and Bank One are examples of two large bank card issuers that do not issue fixed-rate bonds without a swap in the trust. Capital One's asset pool is considered "fixed-rate," so they actually have the opposite treatment—floating-rate ABS must be swapped to get off-balance sheet asset/liability treatment. Fleet Bank is an example of an issuer whose accountants have taken the unusual position that its portfolio is a mixture of both fixed- and floating-rate assets. That issuer can therefore issue a combination of both fixed- and floating-rate ABS without incurring the costs of a swap.

<sup>13</sup> The Class B and Class C of this series carry floating-rate coupons that were 2.3% and 3%, respectively, in September 2002.

**“Day count” has some, but not much, effect on reported yield**

Excess spread compression, in particular for the handful of older, unswapped, fixed-rate deals, has also brought another issue to the fore, that of day count. Several issuers have referenced the day count issue in months with relatively few business days, implying that, all else equal, a greater number of business days in the following month would cause yield to increase again. This phenomenon stems from the fact that each month has a different number of days on which collections can actually be received and processed. If we assume that collections are not processed on holidays or Sundays, but are processed on Saturdays (which we believe to be standard practice), the number of “business days” during months in 2001 and 2002 ranges from between 23 and 27 days, as shown below. It should also be noted that issuers generally state that Mondays are a big collection day (perhaps because many people don’t put their bills in the mail until the end of the week), and so months which include more Mondays tend to generate greater collections, all else equal.

**Figure 12: Collections processing days per month (excludes Sundays and US Post Office holidays)**



Source: US Postal Service

The following example shows how day count can affect reported yield; yield can vary as much as 288 bp (19.44% – 16.56%) simply due to fewer business days. We assume a trust with a principal receivables pool of \$1 billion, and reported annualized yield of 18% in a month that has 25 business days. We then “back into” an assumed collection amount per day, as follows:

**Figure 13: A day count example – backing into daily collections**

*\$1 billion of principal receivables  
 18% annualized yield, in a month with 25 business days  
 As shown below, this implies daily collections of \$600,000*

Trust Principal Receivables .....	\$1,000,000,000
Reported Annualized Yield .....	18%
Implied Monthly Yield .....	18%/12 = 1.50%
Monthly Cash Collections .....	1.50% * \$1,000,000,000 = \$15,000,000
Implied Daily Collections (with 25 business days).....	\$15,000,000/25 = \$600,000

Source: Deutsche Bank



Having arrived at an assumption for daily collection activity, we can then do the calculation above, in reverse, to see how reported annualized yield might vary as actual business days vary.

**Figure 14: Day Count Numerical Example**

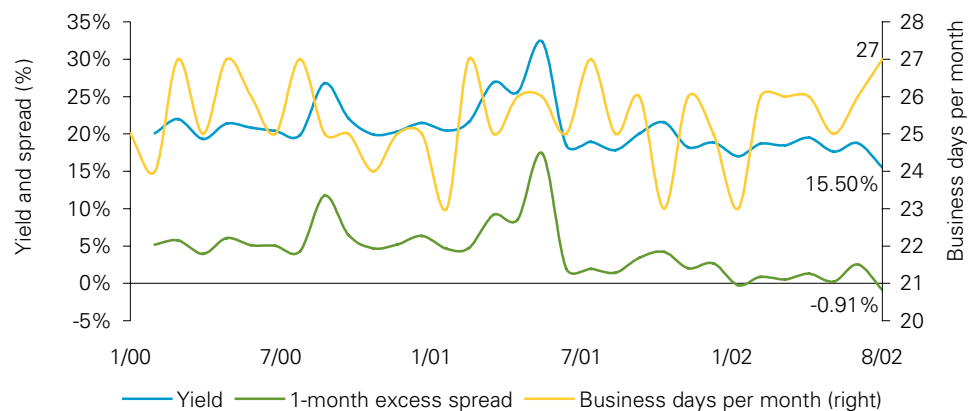
(1) Business Days	(2) Principal receivables	(3) Per day collections	(4) (1) x (3) Monthly collections given business days	(4) / (2) Resulting monthly yield	Reported annualized yield*
23	\$1,000,000,000	\$600,000	\$13,800,000	1.38%	16.56%
24	\$1,000,000,000	\$600,000	\$14,400,000	1.44%	17.28%
25	\$1,000,000,000	\$600,000	\$15,000,000	1.50%	18.00%
26	\$1,000,000,000	\$600,000	\$15,600,000	1.56%	18.72%
27	\$1,000,000,000	\$600,000	\$16,200,000	1.62%	19.44%

\* Monthly collections of finance charges and fees, multiplied by 12

Source: Deutsche Bank

The above example demonstrates the effect of day count on reported yield. However, the data for specific trusts suggests that day count is generally less of an effect than other factors. The chart below shows historical reported annualized yield for the Providian Master Trust Series 2000-1, with the number of business days on the second y-axis.

**Figure 15: PNBMT Series 2000-1; the number of business days shows minimal correlation with reported yield**



Source: Deutsche Bank

While the chart above does show some correlation, it is clear that day count alone is not significant enough to explain most performance variation. In fact, the most recent monthly low in excess spread was in September, a month when the yield in the Providian Master Trust was 15.5%, and there were 27 business days.

**Issuers are increasingly limited from taking steps to "save" a deal**

Given that a handful of deals are still close to 0% 1-month excess spread (PNBMT 1997-4, PNBMT 1999-2, PNBMT 2000-1, CHAMT 1996-3 and CHAMT 1999-3), many have asked, what can issuers today do to prevent an early amortization? In the past a number of actions were taken. The next set of charts summarize deals (primarily credit cards, since they are the dominant revolving asset type) that went into early

amortization, as well as deals where issuer's actions appear to have helped prevent the deals from going into early amortization.<sup>14</sup>

In addition to the issuers on the included table, Sears also took a related, supportive action in 1998. Though not facing a need to "save" a deal, Sears nonetheless saw its credit enhancement requirements increase by 4% for its triple-A Class As issued from Sears Credit Account Master Trust II, effective with Series 1998-1. Rather than face investor skepticism, or market tiering, for previously issued transactions that had less credit enhancement, Sears voluntarily increased the credit enhancement on the older deals to match the new, higher requirement. As a retailer not subject to bank regulatory capital requirements, Sears was less concerned with getting off-balance sheet account treatment, and their securitizations are treated as on-balance sheet obligations. This retroactive boosting of credit enhancement would generally not be a viable option available to regulated entities today, because of the accounting treatment.

As a general matter, the ability of an issuer (putting aside for a moment the motivation) to "save" their deal is a function of several factors. At the extreme, an unregulated issuer who keeps their program on-balance sheet has free reign. However, regulated issuers (i.e. most credit card ABS issuers) have more limited ability to protect their ABS. For banks, support of an ABS can jeopardize both regulatory accounting (and hence regulatory capital requirements) and financial accounting (depending on whether it is on-balance sheet or not). Today a credit card bank is far more constrained than was the case during the last industry "crisis" (when losses peaked in 1997). The regulators most recently addressed the issue of "implicit recourse" with guidance intended to clarify what can be a murky accounting issue. Four regulatory agencies came together in May 2002 to provide clarification on actions they viewed to be implicit recourse in securitization. The regulators acknowledge in the guidance that these are steps issuers might be inclined to take in order to preserve their access to the ABS market when performance deterioration threatens their program. The key forms of "post-sale support" which would cause securitized receivables to be subject to *on-balance sheet* accounting are shown below:

- "Discounting receivables," or re-characterizing a set portion of principal receivables as finance charge receivables, as a means to increase yield
- Purchasing receivables from a trust at a value greater than fair value
- Adding credit enhancement post-closing, and
- Exchanging performing assets for non-performing assets in a trust

However we do believe there are still a few areas of flexibility for select issuers. What they *can* do is:

- Hedge the interest rate risk component appropriately (as now required by FASB)
- Manage performance (i.e. raise yields in response to rising losses)
- Add better-performing (often newer) accounts to the trust (generally a less viable alternative for monolines, and subject to greater scrutiny)
- Support the deal, and take the capital hit by moving it back on-balance sheet (not feasible for many, not popular for any)

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<sup>14</sup> While we believe this exhibit to be reasonably complete, some of these things are done quietly and, especially for private placements, would be known only to the participants.

## Early Amortization – “Close Calls”

### Cases of Actual and “Near Misses” Early Amortization Events

Trust	Date	Problem prompting early am, or near miss	Action(s) taken to prevent early am	Comment	Ability to take step today?
NextCard Credit Card Master Note Trust	July 2002	Master trust hit base rate trigger; however, insolvency of NextCard occurred in February 2002	After insolvency, FDIC attempted to find a buyer for the trust accounts with no success. FDIC closed accounts in July 2002, just as deal went into early amortization due to base rate trigger	NextCard insolvency (February 2002) was an early amortization event in transaction documents. However FDIC deemed that unenforceable, and transactions remained outstanding. Transaction finally went in to early amortization period after breaching a base rate trigger in July 2002	N/A
Heilig-Meyers Master Trust	August 2000	Heilig-Meyers filed Chapter 11, an early amortization event in the documents; Heilig-Meyers ultimately closed all of its stores; trustee stepped in as successor servicer, and subsequently transferred to another third party; collateral performance deteriorated dramatically after transfer	None	The servicing transfer was complicated by the fact that Heilig-Meyers collected at the store level (decentralized)	N/A
SRI Receivables Master Trust	June 2000	Bankruptcy of stage stores	None	DIP financing paid down outstanding ABCP	N/A
Ameriserve	February 2000	Bankruptcy of Ameriserve food distribution	None	Some of Ameriserve's largest customers (and obligors on the trade receivables financing) offset some of the receivables with DIP funding, so both receivables and DIP funds used to pay out ABS investors	N/A
Chevy Chase Credit Card Master Trusts I, II	May 1997	Losses beyond initial expectations	Chevy Chase bought surety bonds that provided additional 1% to 3% class-specific enhancement	Because not a monoline, increased capital reserves not as burdensome	Funding credit enhancement beyond contractual requirements is viewed as implicit recourse for capital purposes



**Cases of Actual and "Near Misses" Early Amortization Events**

Trust	Date	Problem prompting early am, or near miss	Action(s) taken to prevent early am	Comment	Ability to take step today?
Banc One Credit Card Master Trust	December 1996	High losses caused one month of negative excess spread	Increased size of CCAs backing certain deals; added \$1.2 billion of higher quality receivables to master trust to stabilize trust performance; changed charge-off policies for bankrupt accounts (from upon notification to 90 days after notification) provided short-term boost to performance	Not sure about regulator response; however, as Banc One was not a monoline, increased capital reserves would not have been as burdensome as would have been the case for a monoline	Given guidelines re: implicit recourse, as well as more recent regulatory concern regarding loss accounting practices, we believe all of these steps would have regulatory consequences today
First Chicago Master Trust II	June 1996	Losses beyond initial expectations	Added \$2.8 billion United Airlines affinity accounts to boost trust performance	Because not a monoline, increased capital reserves not as burdensome	If there were a legitimate business reason (contract terms, etc.) for originally excluding the affinity accounts, and that changes, then later adding the accounts <i>may</i> be okay – this is highly case-specific
First Union Master Credit Card Trust	March/April 1996	Higher-than-expected losses in certain specific solicitations designated to the trust	Removed accounts: in June 1996, removed two specific poorly-performing solicitations; suspended servicing fee in January 1997 for six months; in March 1997, added \$500 million seasoned accounts; repriced accounts (not just for the trust); in May 1, 1997 began to exercise a 3% discount option	After removing two poorly performing solicitations, the OCC annulled the off-balance-sheet treatment, and First Union was required to hold regulatory capital against the securitized receivables. Because this occurred with the first of First Union's actions, the regulators did not need to explicitly state views on the subsequent steps. As a multi-line bank, increased capital requirement less of an issue than if monoline	As in 1996–1997, the addition, removals and discounting would all be construed as implicit recourse for capital purposes. We believe suspending the servicing fee would also be similarly interpreted, although we have not seen a formal regulatory statement on this. Issuers can make changes to their business model (i.e. reprice accounts), but it should not be systematically done to improve receivables designated for the trust
PB&T Master Credit Card Trust II	December 1995	Losses increased dramatically	Initially, added brand new, unseasoned receivables; later increased credit enhancement for the triple-As, from 12.5%, to 18%; lastly, defeased Series 1994-2, a triple-A security	Investor vote was required in order to defease the security. Defeasance achieved by replacing receivables with a term CD issued by BLB. CD was structured to be able to pay interest and principal on the ABS as per the original ABS documents	Adding new receivables as originated would be okay, if contemplated by the documents, and not done specifically to boost performance. Increasing credit enhancement is recourse

**Cases of Actual and "Near Misses" Early Amortization Events**

<b>Trust</b>	<b>Date</b>	<b>Problem prompting early am, or near miss</b>	<b>Action(s) taken to prevent early am</b>	<b>Comment</b>	<b>Ability to take step today?</b>
Mercantile Credit Card Master Trust	November 1995	Higher-than-expected losses	Sold receivables into the trust at a 5% discount; tightened certain underwriting and risk management practices; amended spread account triggers to capture additional excess spread amounts beyond what was contemplated at transaction close	According to Moody's, the OCC gave Mercantile a safe harbor on the discounting option	Changing the underwriting/account management strategies on an issuer's entire managed book of receivables is generally not an issue. However, both discounting and increasing spread account levels would be viewed as implicit recourse
Household Private Label CC Master Trust II	November 1995	Increased losses and declines in yield caused in part by credit-based sales promotions	Increased discounting from 200 bp up to 600 bp; added better quality receivables; retroactively funded a reserve account		All would be seen as implicit recourse for capital purposes today
Woodward & Lothrop Funding Master Trust	January 1994	Bankruptcy of Woodward & Lothrop caused early amortization of credit card receivables transaction	None	DIP financing as well as receivables collections used to pay ABS investors early in full	N/A
Southeast Credit Card Trust	July/August 1991	Insolvency of Southeast Credit Card Trust	None	Paid out early, per documents (not immediate one-time payment, as above)	N/A
RepublicBank Delaware Note Series A	Late 1980s	Insolvency of RepublicBank	None	FDIC made immediate payment to investors upon receivership	N/A

*Source: Deutsche Bank, Moody's Investors Service*

## Conclusion

If we can pinpoint a common thread to most of the credit card-related negative events of the past several months, we believe it is a renewed focus on the importance of the servicer in credit card ABS. The regulatory story is very much issuer-specific, with some servicers under pressure to tighten what may have been seen as less conservative underwriting procedures, while others seem to have practices which generally satisfy regulator concerns. The NextCard case has also highlighted the importance of not just underwriting and account management policies, but the overall health of the issuer's balance sheet, and marketability of an issuer's business. We expect rating agencies and investors alike to begin to focus more on the underlying health of the seller servicer, and take steps to understand the individual business models and issuer financial flexibility, perhaps more than has been the case in the past. The implication for spreads is that we expect tiering by servicer to continue to be unusually pronounced through the balance of the year. Once the direction of the economy becomes clearer, and regulatory guidance is finalized, and all affected issuers fully address new requirements, tiering may subside, but a reversion to old norms appears highly unlikely.

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Japan Fixed Income Morning Memo	Atsushi Mizuno
LatAm Strategy Daily	Will Oswald
New York FX Morning Briefing	Kenneth Landon
New York FX Wrap	Kenneth Landon
one-stop daily (High Yield)	David Bitterman, Andrew W. Van Houten
US Daily Economic Notes	Joseph LaVorgna
US Fixed Income Daily	Marcus Huie
US/European Relative Value Daily	Jamil Baz, Ifty Islam
US Integrated Credit Strategy Daily	John Tierney





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