Nomura Fixed Income Research

ABS Credit Migrations 2004

7 December 2004

The red pill or the blue pill? Choose. If you choose the blue pill, the story ends right here. You stop reading, put the report down, and believe whatever you want. If you choose the red pill, you keep on reading and learn just how often ABS transactions really *experience credit trouble…… All we offer is the truth.*[1]

Table of Contents

I. Introduction

Asset-backed securities (ABS) today display a higher frequency of defaults and downgrades than they did a few years ago. However, defaults and downgrades are concentrated more heavily in certain areas of the ABS landscape than in others. ABS from certain vintages display markedly higher frequencies of defaults and downgrades than ABS from other vintages. In particular, the frequency of defaults and downgrades rises steadily in vintages from 1993 through 1998 and then gradually declines. It remains to be seen whether the declining frequencies represent real improvement in the credit performance of newer vintages or whether the newer vintages will "catch up" with the poor performers of the late 1990s.

Among the major asset classes, ABS backed by student loans and bank credit cards display the lowest frequencies of adverse credit migrations. Deals backed by home equity loans display somewhat higher frequencies than they did a few years ago, but most defaults and downgrades are

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* Christina Auriemma, a student at Fordham University, contributed to this report during her summer internship with Nomura Securities. The authors gratefully acknowledge the valuable comments provided by the rating agencies on early drafts of this report. Any remaining errors or inaccuracies are solely the authors' responsibility.

[1] Warner Bros., Village Roadshow Pictures – Graucho II Film Partnership, and Silver Pictures, *The Matrix* (1999) (red pill, blue pill theme).

concentrated in deals from a small number of issuers. Not surprisingly, ABS backed by manufactured housing loans and aircraft receivables display the highest frequencies of adverse credit migrations. Market spreads on ABS backed by different asset classes appear to capture this effect reasonably well.

Along the rating dimension, ABS deals rated by different rating agencies and different *combinations* of rating agencies display varying frequencies of adverse credit migrations. Deals rated by two or more rating agencies display lower overall frequencies of adverse credit migrations than deals rated by only one. For multiple-rated deals, those rated by both Moody's and Standard & Poor's display the lowest frequencies of adverse credit migrations. Market spreads appear to capture this effect as well.

II. Background on the Study

In January 2002, we published a report titled *ABS Credit Migrations*.[2] This study is an extension and expansion of that original effort. In the earlier report, we examined the frequency of adverse credit events affecting U.S. ABS deals issued from 1990 through mid-year 2001. This study extends our results through mid-year 2004, covering an additional three years.

Deals Included and Excluded: As before, our sample universe included only ABS in the narrow sense. That is, we excluded the following types of deals: (1) CBOs/CLOs, (2) CMBS, and (3) residential MBS backed by prime-quality mortgage loans or so-called "alternative A" mortgage loans. We also excluded deals backed by non-U.S. assets, even if the related securities were denominated in U.S. dollars. We generally excluded cross border remittance deals and cross border future flow deals. As in the prior study, we included the ill-fated Hollywood Funding deals.

Sources: Our main source for identifying and classifying deals was the database maintained by *Asset Backed Alert*. We used several sources for capturing information about adverse credit migrations. Naturally, we used lists of rating actions from the rating agencies. In addition, we used listings published in *Asset Securitization Report*, Bloomberg℠ and information from other publicly available sources. Overall, our final sample universe consisted of 6,499 deals, compared to 4,406 in the earlier study.

Adverse Migrations Only: As in our earlier study, we examined only adverse credit developments – not positive ones. As before, we looked for patterns or signals that a fixed-income portfolio manager could use for avoiding unpleasant surprises, or for identifying situations in which to seek incremental return as compensation for credit volatility. We feel that this orientation reflects the ordinary view that the primary goal of credit analysis is to avoid trouble.

Types of Adverse Credit Migrations: We categorized deals in the same manner that we had in the prior study. We considered adverse credit events of varying degrees of severity. We defined four categories: (1) defaults, (2) near defaults, (3) major downgrades, and (4) minor downgrades.

- We classified a deal as having experienced a "default" if it had any tranche that initially carried an investment grade rating (Baa3/BBB- or better) and that either experienced an actual payment default or was downgraded to default status.[3] For purposes of the default category, we ignored defaults of any tranches that carried speculative-grade ratings at issuance. Appendix A contains the stories behind certain deals that received default classification. Appendix A does not repeat the stories included in the prior study.
- We classified as "near default" any deal where a tranche that was investment-grade at issuance fell to Caa/CCC or worse, and which did not otherwise qualify for default classification.

[2] *ABS Credit Migrations*, Nomura Fixed Income Research (9 Jan 2002, updated 5 Mar 2002).

[3] We treated each of the following as a downgrade to default status: (*i*) a downgrade by Moody's to Ca or lower, (*ii*) a downgrade by Standard & Poor's to D, or (*iii*) a downgrade by Fitch to DDD or lower.

- We defined the "major downgrade" category as including deals where a tranche was either (i) downgraded from Aaa or AAA or (ii) downgraded from investment grade (Baa3/BBB- or better) to speculative grade (Ba1/BB+ or lower) and, in either case, did not otherwise qualify for default or near default classification.
- We defined the "minor downgrade" category as including all deals where any tranche experienced a downgrade that did not qualify as a major downgrade and which did not otherwise qualify for default, near default, or major downgrade classification.

The foregoing categories apply to entire deals. Each deal receives the classification of its "worst" tranche. That is, a whole deal receives default classification even if only a single tranche meets the criteria for that treatment. Moreover (for purposes of part III.C, below), a deal's classification is attributed to each rating agency that rated it, regardless of whether the rating agency rated the specific tranche that triggered the classification.

A small proportion of deals have both wrapped (insured) and unwrapped (uninsured) classes. When such a deal has experienced an adverse credit event, we generally have treated the deal as if it was two separate deals, one wrapped and one unwrapped. The adverse credit event is assigned to the unwrapped portion but not to the wrapped portion of the deal. This adjustment to the data may improve the usefulness of the rating agency performance results covered in part III.C.

By creating different categories of adverse credit events, we were able to produce results that can be used by market participants with varying degrees of tolerance for such events. For example, a portfolio manager with a high tolerance for risk might care only about defaults. A different portfolio manager – one operating under a restriction that requires him to sell securities whose ratings drop below a certain level – might have much less tolerance and would care about minor downgrades and anything worse. The four categories cover nearly the whole range of adverse credit events. The categories do not capture negative press coverage affecting deals or watchlistings that do not result in downgrades.

We measured the frequency of adverse credit events in terms of the number of deals. This has the effect of treating all deals equally, regardless of their size. We also calculated frequencies excluding all deals wrapped by bond insurance policies from the monoline bond insurers. This did have significant impact, as discussed below. Lastly, because of the very large number of adverse credit migrations associated with manufactured housing ABS deals, we calculated frequencies excluding deals from that sector.

III. Results

A. Credit Events by Asset Class

ABS backed by student loans, bank credit cards, and utility receivables show the strongest performance. Deals from those sectors have experienced the lowest frequencies of adverse credit migrations. Deals backed by prime-quality auto loans also have experienced very low frequencies of defaults and near defaults, but noticeable levels of major downgrades and minor downgrades. In the home equity ABS sector, the overall frequency of defaults is somewhat higher. In that sector, numerous deals from GreenTree/Conseco and from ContiMortgage earned default classification.

ABS backed by manufactured housing loans display the highest frequencies of adverse credit migrations. That sector is, by far, the worst performer on the entire ABS landscape. Aircraft ABS posted the second-worst showing, followed by the "other" asset class (*i.e.*, miscellaneous) and equipment leasing.

We retained the same asset class categories as we had used in the earlier study. However, doing so arguably obscures a few notable points. First, the "other" includes both healthcare receivables and franchise loans. Deals backed by those assets have suffered more than their proportionate share of adverse credit migrations (see Appendix A). The inclusion of the healthcare and franchise loan sub-classes within the "other" category undoubtedly makes the performance of that asset class appear weaker than it otherwise would.

Chart 1a below summarizes the frequencies that we calculated for the four categories of adverse credit events for different asset classes. Each bar in the chart shows the "cumulative" frequency of credit events equal to or worse than a specified level of seriousness for a given asset class. That is, each row includes all the rows in front of it. The front row of the chart shows the frequency of "defaults" (as defined above) for each asset class. The frequency shown by each bar in the second row is the combined frequency of defaults and near defaults. The third row shows the combined frequency for major downgrades, near defaults, and defaults. The back row shows the combined frequency for minor downgrades, major downgrades, near defaults, and defaults.

We have plotted the charts in terms of cumulative frequency because we believe this measure is most useful to investors. Aversion to adverse credit events naturally can vary among investors. However, any single investor's aversion to such events must rise with increasing seriousness of such events. Accordingly, a hypothetical investor might have a high tolerance for major and minor downgrades but might be highly averse to near defaults. The investor's aversion to defaults would be at least as strong as his aversion to near defaults. Accordingly, that investor could use the second row of Chart 1a to see the cumulative frequency of events equal to or worse than near defaults.

Chart 1a
Cumulative Event Frequencies by Asset Class
(by number of deals; including all deals)

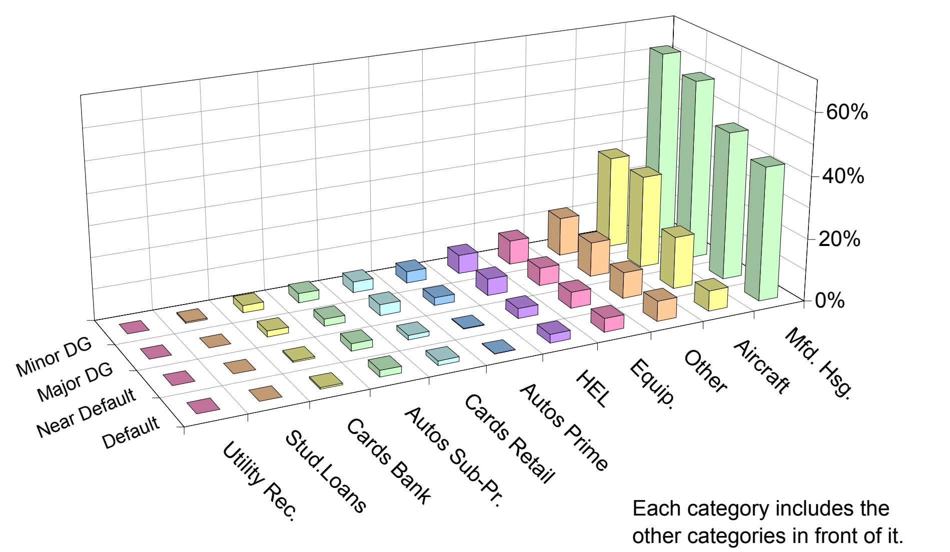


Chart 1b shows the same data as Chart 1a, but expands detail on certain asset classes. As shown on Chart 1a, the frequency of defaults in the home equity sector is much higher than in the prime auto loan, bank credit card, and student loans sectors.

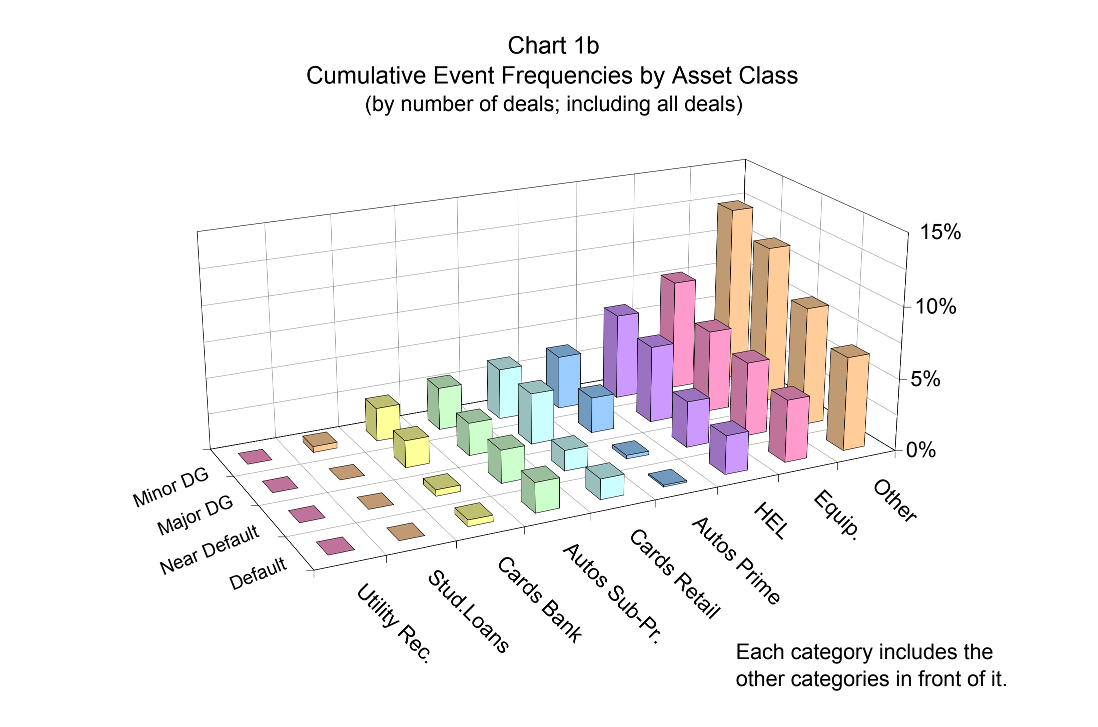


Table 1 below shows the frequency data used to generate Charts 1a and 1b:

Table 1: Cumulative Event Frequencies by Asset Class
(by number of deals; including all deals)

TYPE	Defaults	Near Defaults (and worse)	Major Downgrades (and worse)	Minor Downgrades (and worse)	Number of Deals
Utility Receivables	0	0	0	0	30
Student Loans	0	0	0	1	244
Cards - Bank	4	4	17	21	909
Sub-Prime Autos	9	10	10	13	437
Cards - Retail	2	2	5	5	140
Autos Prime	1	2	20	30	801
Home Equity	62	74	124	139	2300
Equipment	15	18	20	27	346
Other	61	78	104	117	936
Aircraft Receivables	7	18	32	32	107
Manufactured Housing	107	119	146	155	249
Total	268	325	478	540	6499

Note: Each column includes the values in all the other columns to its left.

Another way of looking at the results is to exclude deals wrapped by bond insurance policies from the monoline bond insurers. Charts 2a and 2b and Table 2 below show the results for that case. For the sub-prime auto asset class, which has a material proportion of wrapped deals, the frequency of adverse credit events rises appreciably. The home equity sector displays slightly weaker performance when wrapped deals are excluded.

Chart 2a
Cumulative Event Frequencies by Asset Class
(by number of deals; excluding monoline-wrapped deals)

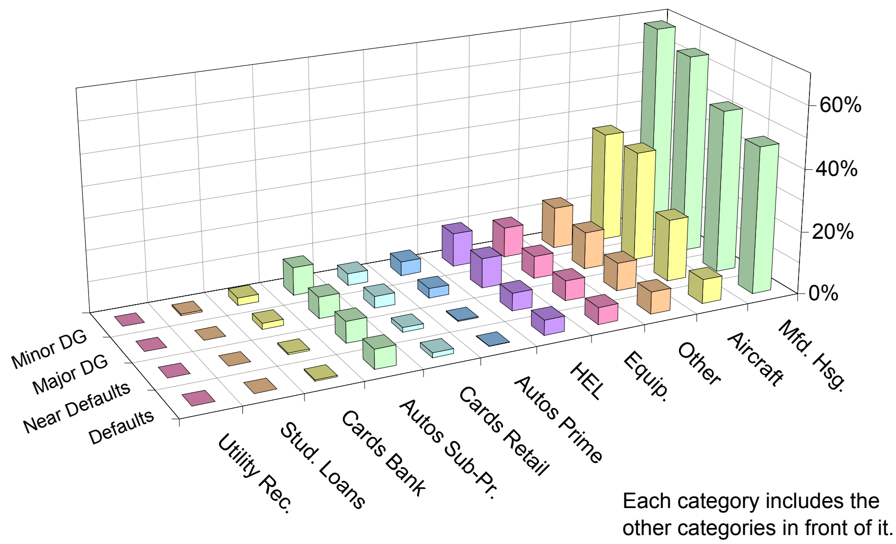


Chart 2b
Cumulative Event Frequencies by Asset Class
(by number of deals; excluding monoline-wrapped deals)

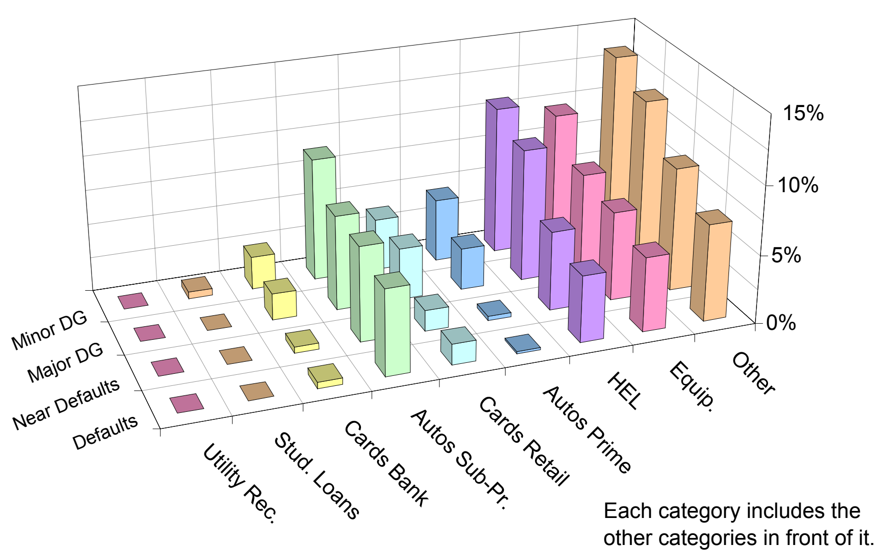


Table 2: Cumulative Event Frequencies by Asset Class (by number of deals; excluding monoline-wrapped deals)					
TYPE	Defaults	Near Defaults (and worse)	Major Downgrades (and worse)	Minor Downgrades (and worse)	Number of Deals
Utility Receivables	0	0	0	0	30
Student Loans	0	0	0	1	200
Cards - Bank	4	4	17	21	882
Sub-Prime Autos	9	10	10	13	145
Cards - Retail	2	2	5	5	132
Autos Prime	1	2	20	30	655
Home Equity	62	74	124	139	1281
Equipment	15	18	20	27	277
Other	61	78	104	117	863
Aircraft Receivables	7	18	32	32	90
Manufactured Housing	107	119	146	155	227
Total	268	325	478	540	4782
Note: Each column includes the values in all the other columns to its left.					

B. Credit Events by Vintage

ABS from the late 1990s display the highest frequencies of adverse credit migrations. The 1998 and 1997 vintages show the worst performance overall. For example, more than 9% of the deals from 1997 were categorized in the default category. Even omitting deals backed by manufactured housing loans, the proportion of the 1997 vintage in the default category remains above 6%.

The 1993 vintage displays the lowest frequency of adverse credit migrations. For vintages from 1994 through 1998, the frequency of adverse credit migrations rose steadily. The 1999 and 2000 vintages display only slightly better performance among the seasoned vintages. The most recent vintages seemingly display an improving trend. However it is not clear whether this reflects actual improvements in overall credit performance or instead merely reflects the fact that those vintages are still young. Deals from the young vintages may suffer additional adverse migrations as they continue to age, whereas many deals from the old vintages are already retired.

Chart 3 displays the frequencies of adverse credit migrations by vintage. Chart 3 should be read in the same manner as Chart 1a. The four-category classification scheme is the same (see pages 2-3) and each row includes all the rows in front of it (*i.e.*, the bars for each category reflect the cumulative frequency of adverse migrations in that category as well as those in all worse categories).

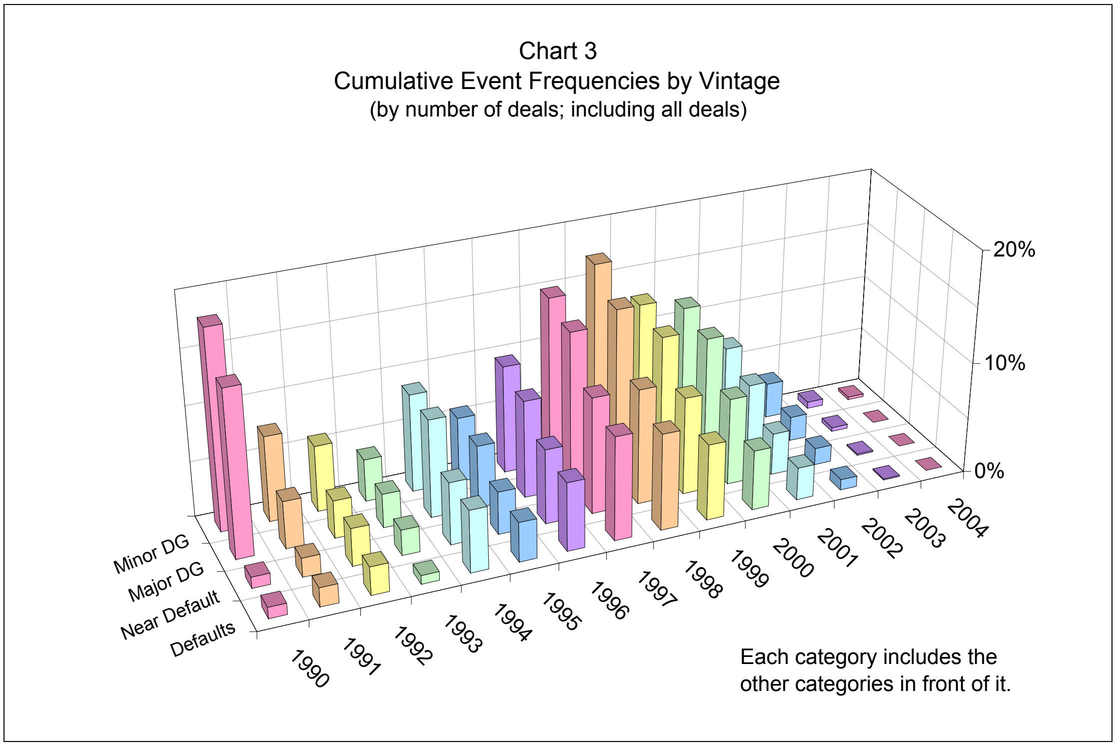


Table 3: Cumulative Event Frequencies by Vintage (by number of deals; including all deals)					
TYPE	Defaults	Near Defaults (and worse)	Major Downgrades (and worse)	Minor Downgrades (and worse)	Number of Deals
1990	1	1	15	18	100
1991	2	2	5	9	117
1992	3	4	4	7	118
1993	1	3	4	5	131
1994	12	12	19	19	215
1995	14	15	22	23	392
1996	33	36	47	52	535
1997	56	63	85	91	602
1998	52	62	92	104	600
1999	39	50	69	74	572
2000	29	42	60	64	539
2001	18	23	37	45	613
2002	7	11	16	23	726
2003	1	1	3	5	839
2004	0	0	0	1	400
Total	268	325	478	540	6499
Note: Each column includes the values in all the other columns to its left.					

Chart 4 and Table 4 show the vintage results excluding deals backed by manufactured housing loans. As shown on the chart, most of the vintages display lower frequencies of adverse credit migrations when the ill-fated MH sector is excluded. However, the overall relationship among the vintages remains stable, with the overall peak in 1998.

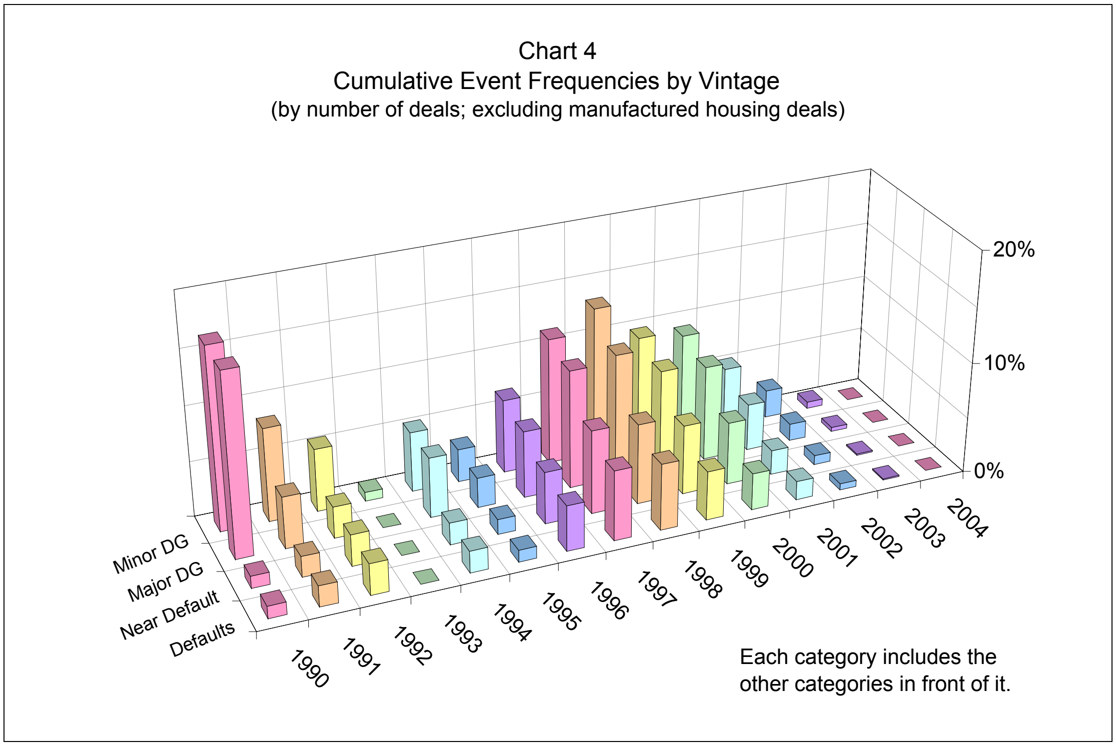


Table 4: Cumulative Event Frequencies by Vintage (by number of deals; excluding manufactured housing deals)					
TYPE	Defaults	Near Defaults (and worse)	Major Downgrades (and worse)	Minor Downgrades (and worse)	Number of Deals
1990	1	1	15	15	91
1991	2	2	5	9	107
1992	3	3	3	6	106
1993	0	0	0	1	124
1994	4	4	11	11	203
1995	4	5	10	11	371
1996	21	24	31	34	512
1997	36	43	61	65	571
1998	34	41	64	76	568
1999	24	34	49	54	545
2000	17	29	44	48	515
2001	10	13	25	32	592
2002	4	6	11	18	712
2003	1	1	3	5	836
2004	0	0	0	0	397
Total	161	206	332	385	6250
Note: Each column includes the values in all the other columns to its left.					

C. Credit Events by Rating Agency

Deals with Multiple Ratings: The vast majority of ABS deals carry ratings from at least two rating agencies. Of those deals, the ones that lack ratings from either Moody's or Standard & Poor's display substantially higher frequencies of adverse credit migrations than deals that carry ratings from both of those rating agencies.

Given three rating agencies, there are four possible rating agency combinations for multiple-rated deals:

- Moody's + Standard & Poor's only (M+S)
- Moody's + Standard & Poor's + Fitch (M+S+F)
- Standard & Poor's + Fitch only (S+F)
- Moody's + Fitch only (M+F)

Over the entire population of deals, those rated by Moody's and Standard & Poor's, but not by Fitch, displayed the lowest frequency of adverse credit migrations. However, within the subset of uninsured deals, those rated by all three rating agencies displayed performance that was even slightly better than those rated by just Moody's and S&P.

Deals rated by Moody's and Fitch, but not by S&P, showed the highest frequency of adverse credit migrations. Deals rated by S&P and Fitch, but not by Moody's, displayed frequencies that were nearly as high.

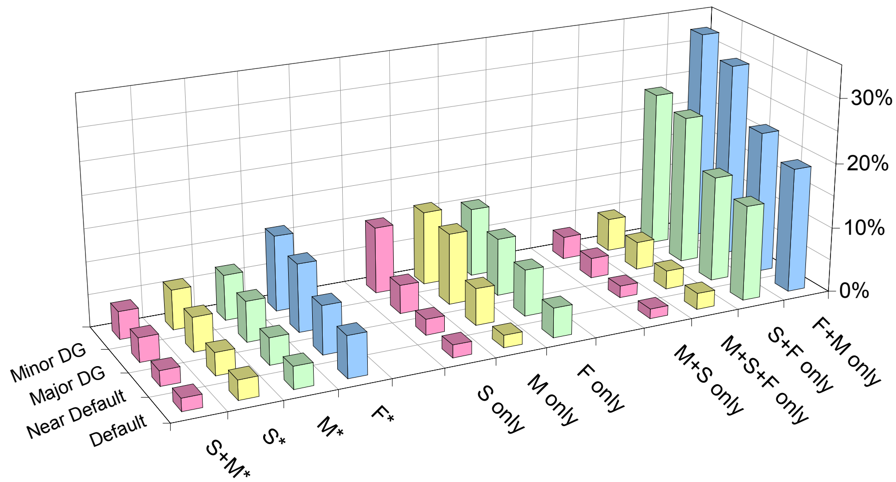
Single-Rated Deals: Deals rated by only one rating agency experienced somewhat higher overall frequencies of adverse credit migrations than deals rated by two or more rating agencies. However, somewhat surprisingly, single-rated deals displayed a lower frequency of defaults (3.05%) than deals with multiple ratings (4.34%).

For deals rated by only one rating agency, the ones rated by Standard & Poor's displayed the lowest cumulative frequencies of near defaults, major downgrades, and minor downgrades. Deals rated by Fitch displayed the highest frequency of defaults and near defaults, while deals rated by Moody's displayed the highest frequency of major downgrades and minor downgrades, but the lowest frequency of defaults. Chart 5 displays the frequencies of adverse credit events in ABS deals based on which rating agencies supplied ratings for securities issued in the deals. Deals that carried ratings from one of the component organizations that became today's Fitch are collectively shown under that label. Before 1 June 2000, the "Fitch" category included two rating agencies: Fitch Investors Service, and Duff & Phelps. However, on 12 April 2000 Duff & Phelps became a subsidiary of Fitch and within a few months the operations of the two had been integrated.[4]

As in the earlier charts, each column on Chart 5 shows the "cumulative" frequency of credit events equal to or worse than a specified level of seriousness and each row includes all the rows in front of it. However, unlike the earlier charts, each category along the width of the chart relates to deals that carried ratings from a particular rating agency or combination of rating agencies.

[4] The merger of Fitch and IBCA, Ltd in 1997 is not significant for this study because IBCA had not been a supplier of ratings on U.S. ABS deals before the merger.

Chart 5
Cumulative Event Frequencies by Rating Agency
(by number of deals; including all deals)



* regardless of whether rated by other rating agencies

Each category includes the other categories in front of it.

Consider the first grouping of bars on Chart 5. The first category (S+M*) relates to deals that carried ratings from both Standard & Poor's and Moody's, and which may or may not have carried Fitch ratings. The second category (S*) relates to deals that carried ratings from Standard and Poor's and which may or may not have carried ratings from other rating agencies. The third category (M*) relates to deals that carried ratings from Moody's and which may or may not have carried ratings from other rating agencies. The fourth category (F*) relates to deals that carried ratings from Fitch and which may or may not have carried other ratings. As shown by the relative heights of the bars in the first grouping, each of Moody's and Standard & Poor's appears to have added credit strength to the other. Deals that carried ratings from both Moody's and Standard & Poor's experienced somewhat lower frequencies of adverse credit events than the other categories shown in the first grouping.

Consider the third (right-most) grouping of columns. That grouping relates to deals rated by at least two rating agencies. Within the third grouping, the first combination (M+S only) relates to deals that carried ratings from both Moody's and Standard & Poor's but ***not*** from Fitch. The second combination (M+S+F) relates to deals that carried ratings from Fitch in addition to ratings from both Moody's and Standard & Poor's. As shown by the relative heights of the bars, deals rated by all three rating agencies experienced slightly higher frequencies of adverse credit events. This is probably because a large proportion of bond-insured deals have ratings from Moody's and S&P only. Because of their bond insurance, those deals do not experience adverse credit migrations. The third and fourth combinations show the performance of deals rated by either (i) Standard & Poor's and Fitch but not by Moody's and (ii) Moody's and Fitch but not Standard & Poor's. These two categories compose relatively small populations. Nonetheless, their high frequency of adverse credit migrations is striking.

The middle grouping of bars on Chart 5 relates to deals rated by only one rating agency. As noted above, for deals rated by only one rating agency, those rated by Standard & Poor's displayed the lowest cumulative frequencies of near defaults, major downgrades and minor downgrades. Those rated by Moody's displayed the lowest frequency of defaults.

Table 5 displays the data underlying Chart 5.

Table 5: Cumulative Event Frequencies by Rating Agency
(by number of deals; including all deals)

TYPE	Defaults	Near Defaults (and worse)	Major Downgrades (and worse)	Minor Downgrades (and worse)	Number of Deals
S&P+Moody's*	93	110	174	200	4712
S&P*	161	186	283	326	5353
Moody's*	184	224	338	377	5425
Fitch*†	222	259	363	403	3473
Moody's + S&P only	37	46	77	86	2474
Moody's+S&P+Fitch†	56	64	97	114	2238
S&P + Fitch† only	64	71	100	105	436
Fitch† + Moody's only	86	99	135	147	449
S&P only	4	5	9	21	205
Moody's only	5	15	29	30	264
Fitch† only	16	25	31	37	350

* Regardless of whether rated by other rating agencies.
† Includes Duff & Phelps
Note: Each column includes the values in all the other columns to its left. The sample included 83 unrated deals.

As shown on Table 5, the absolute number of defaults of single-rated deals is quite small. The somewhat higher frequencies of defaults for deals rated only by Fitch may be due to the fact that some of those deals initially carried ratings of A or BBB on their senior tranches. Table 5a lists the single-rated deals classified in the default category and identifies the rating agencies that rated them as well as the ratings initially assigned to their senior tranches:

Table 5a: Defaults of Single-Rated Deals			
Rating Agency		Deal	Initial Rating of Senior Tranche
Fitch	Duff	Securitized Multiple Asset Rated Trust 1997-3	A
		T&W Funding 1997-A	AAA
		Towers Funding I	A
		Towers Funding II	A
		Towers Funding III	A
		Towers Funding IV	A
		Towers Funding V	A
	Fitch	LTV Steel (inventory financing)	BBB
		T&W Funding 1998-A	AAA
		T&W Funding 1998-B	AAA
		Unicapital 1999-1	BBB*
		Unicapital 2000-1	BBB*
	Fitch and Duff	EMAC Secured Lending Corp. 1998-1	AAA
		FMAC Loan Receivables Trust 1997-B	AAA
		ICON Equipment Lease Grantor Trust 1998-A	AAA
		T&W Funding 1999-A	AAA
Moody's		NPF VI 2002-1 (NCFE)	Aaa
		NPF XII 2000-3 (NCFE)	Aaa
		NPF XII 2001-3 (NCFE)	Aaa
		NPF XII 2001-4 (NCFE)	Aaa
		NPF XII 2002-1 (NCFE)	Aaa
S&P		Hollywood Funding No. 5 Ltd.	AAA
		Hollywood Funding No. 6 Ltd.	AAA
		LTV Steel (trade receivables)	AAA
		Securitized Multiple Asset Rated Trust 1996-2	A
*Highest rating of unwrapped tranche. Deal had wrapped triple-A-rated senior tranche			

Interestingly, five of the sixteen defaulted deals in the "Fitch only" group are the fraudulent Towers healthcare ABS deals. Four more of the deals in the "Fitch only" group are from the series of equipment leasing deals by T&W Financial. All five defaulted deals in the "Moody's only" group are from the series of fraudulent healthcare deals from NCFE.

<u>Effect of Bond Insurance</u>: Excluding deals that include bond insurance changes the results slightly. Excluding such deals reduces the denominators for certain categories, producing slightly higher frequencies of adverse migrations for deals rated by at least two rating agencies. However, the major relationships among the categories remain essentially the same. The key exception is that the deals rated by all three rating agencies display adverse migration frequencies that are slightly lower than the frequencies for deals rated by just Moody's and Standard & Poor's. Chart 6 and Table 6 detail the results.

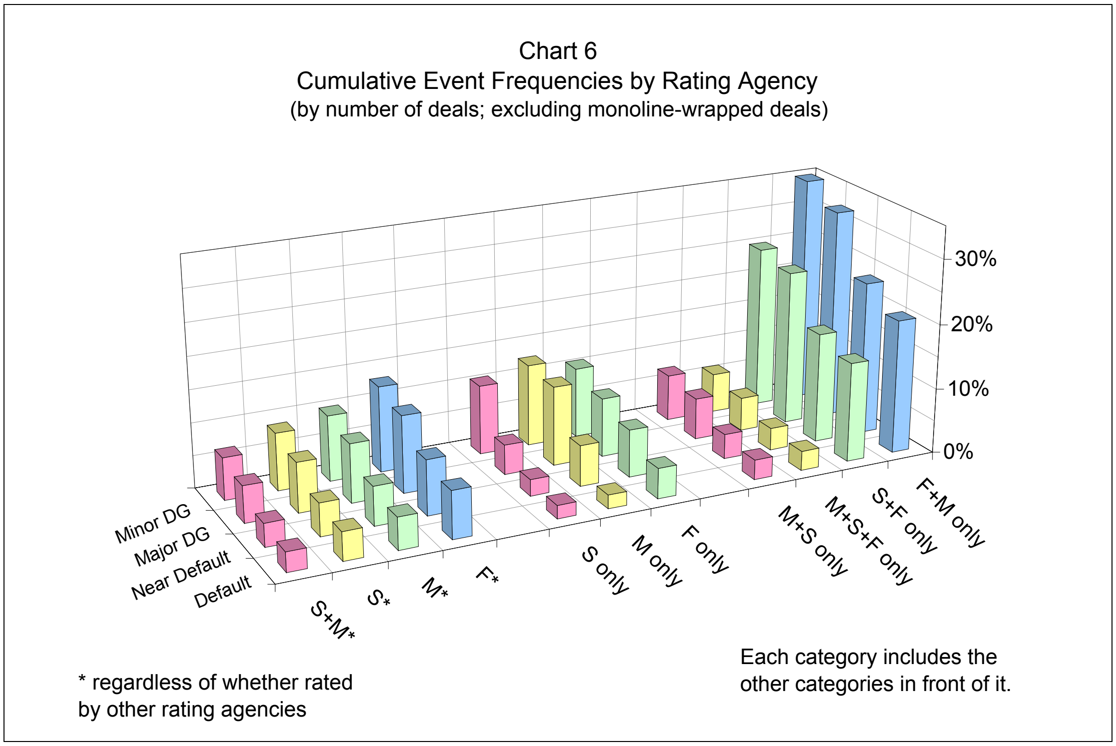


Table 6: Cumulative Event Frequencies by Rating Agency (by number of deals; excluding monoline-wrapped deals)					
TYPE	Defaults	Near Defaults (and worse)	Major Downgrades (and worse)	Minor Downgrades (and worse)	Number of Deals
S&P+Moody's*	93	110	174	200	3087
S&P*	161	186	283	326	3703
Moody's*	184	224	338	377	3743
Fitch*†	222	259	363	403	3059
Moody's + S&P only	37	46	77	86	1208
Moody's+S&P+Fitch†	56	64	97	114	1879
S&P + Fitch† only	64	71	100	105	419
Fitch† + Moody's only	86	99	135	147	418
S&P only	4	5	9	21	197
Moody's only	5	15	29	30	238
Fitch† only	16	25	31	37	343

* Regardless of whether rated by other rating agencies.
† Includes Duff & Phelps
Note: Each column includes the values in all the other columns to its left. Eighty of the unrated deals in the sample were uninsured. Somewhat surprisingly, three of the unrated deals appeared to be wrapped by bond insurance.

Effect of Manufactured Housing: Excluding deals backed by manufactured housing contracts produces a striking improvement, lowering the frequencies of adverse credit migrations for most categories. Even so, the relative performance among the categories remains essentially similar. This indicates that the poor performance of the manufactured housing sector is not disproportionately associated with any particular rating agency, but rather affects all of them. Chart 7 and Table 7 detail the results.

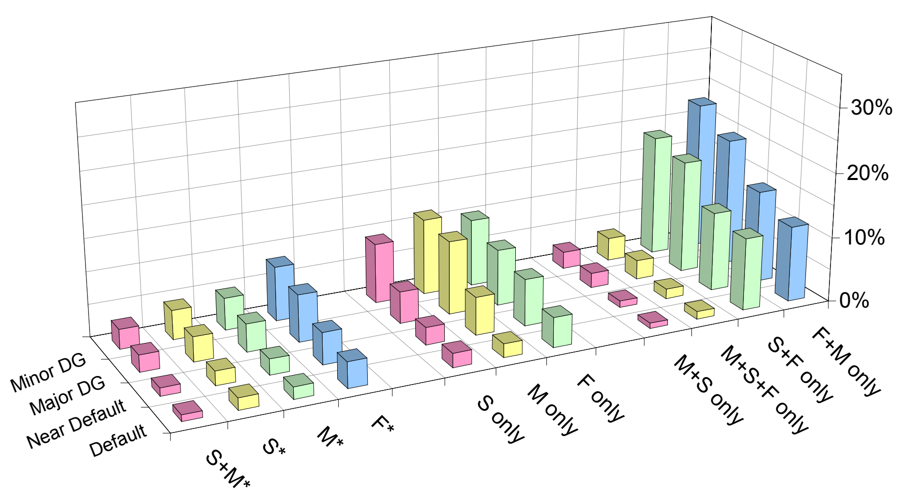


Table 7: Cumulative Event Frequencies by Rating Agency (by number of deals; excluding manufactured housing deals)					
TYPE	Defaults	Near Defaults (and worse)	Major Downgrades (and worse)	Minor Downgrades (and worse)	Number of Deals
S&P+Moody's*	46	58	120	141	4608
S&P*	95	112	199	233	5195
Moody's*	96	127	223	257	5232
Fitch*†	132	162	241	277	3326
Moody's + S&P only	20	25	55	63	2417
Moody's+S&P+Fitch†	26	33	65	78	2191
S&P + Fitch† only	45	49	70	75	402
Fitch† + Moody's only	45	55	76	88	385
S&P only	4	5	9	17	185
Moody's only	5	14	27	28	239
Fitch† only	16	25	30	36	348

* Regardless of whether rated by other rating agencies.
† Includes Duff & Phelps
Note: Each column includes the values in all the other columns to its left. The sample included 83 unrated deals.

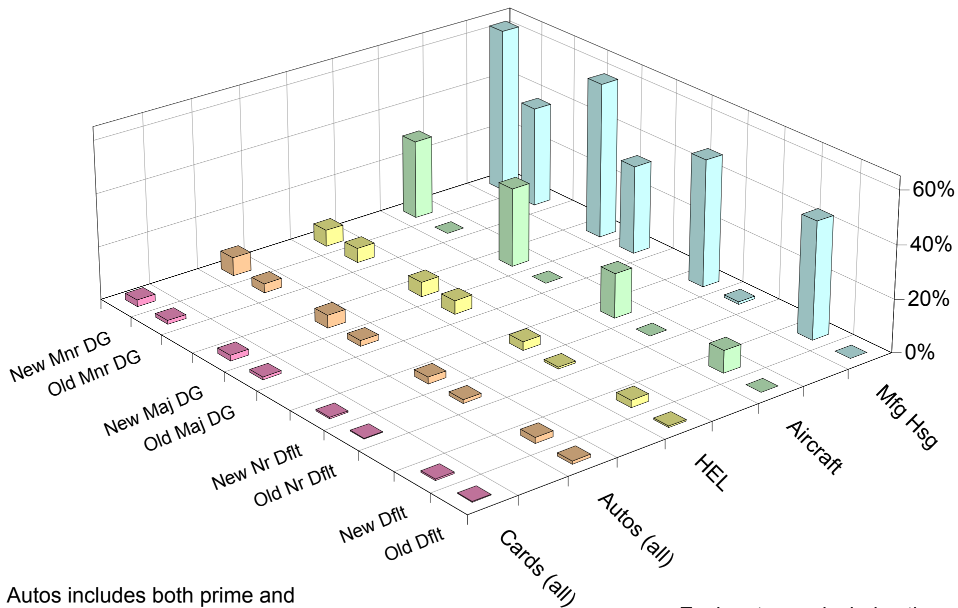
D. Comparison with the Prior Study

ABS as a whole display higher frequencies of adverse credit migrations over the extended period covered by this study (1/1/90 to 6/30/04) than they did during the period covered by the prior study (1/1/90 to 6/30/01). Since the cut-off date for the prior study, the manufactured housing sector deteriorated significantly. Although many deals had suffered minor downgrades or major downgrades before 6/30/01, most of those deals subsequently degenerated to the default and near default categories. Additionally, many of the manufactured housing deals that had not overtly suffered by 6/30/01 later succumbed to the sector's general woes.

The aircraft sector had been pristine through 6/30/01. However, following the terrorist attack on 9/11/01, that sector entered a tailspin from which it has never really recovered.

Each of the three largest ABS sectors (*i.e.*, home equities, autos, and cards) posted some measure of deterioration since the earlier study. Each sector displays a somewhat higher frequency of adverse credit migrations than it did in our last study. The increase in defaults in the home equity sector is notable. Chart 8 and Table 8 detail these results.

Chart 8
Old Study vs. New Study
Cumulative Event Frequencies by Asset Type
(1/1/90 to 6/30/01 vs. 1/1/90 to 6/30/04; by number of deals; including all deals)



* Autos includes both prime and sub-prime borrowers. Cards includes both bank and retail.

Each category includes the other categories in front of it.

Table 8: Old Study vs. New Study
Cumulative Event Frequencies by Asset Type
(01/01/90 to 06/30/01 vs. 01/01/90 to 06/30/04; by number of deals; including all deals)

TYPE	Defaults		Near Defaults (and worse)		Major Downgrades (and worse)		Minor Downgrades (and worse)		Number of Deals	
	Old	New	Old	New	Old	New	Old	New	Old	New
Cards (all)	2	6	2	6	8	22	11	26	759	1049
Autos (all)	9	10	11	12	17	30	27	43	783	1238
Home Equity	8	62	11	74	73	124	78	139	1421	2300
Aircraft	0	7	0	18	0	32	0	32	70	107
Mfd Hsg	0	107	2	119	73	146	83	155	217	249

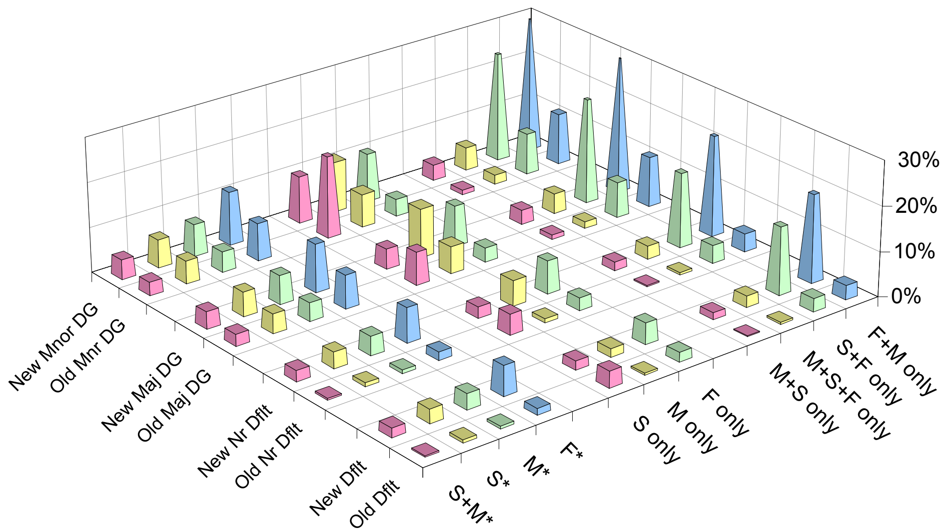
Note: Each column includes the values in all the corresponding ("old" or "new") columns to its left.

Along the rating dimension, the results are similar. Deals rated by all but one combination of rating agencies experienced higher frequencies of adverse credit migrations in this study than in the earlier one. In particular, deals rated by Standard & Poor's and Fitch only and deals rated by Fitch and Moody's only displayed markedly higher frequencies of defaults and near defaults. Likewise, deals rated by all three rating agencies posted higher frequencies of defaults, near defaults, major downgrades, and minor downgrades, though the increase was not as striking.

In contrast to deals rated by all other combinations of rating agencies, deals rated only by S&P displayed a *lower* frequency of adverse migrations in the present study than in the earlier one. Although the total number of "S&P only" deals increased significantly, only one additional deal in the

"S&P only" group suffered an adverse credit migration (major downgrade). Chart 9 and Table 9 display the results.

Chart 9
Old Study vs. New Study
Cumulative Event Frequencies by Rating Agency
(1/1/90 to 6/30/01 vs. 1/1/90 to 6/30/04; by number of deals; including all deals)



* Regardless of whether rated by other rating agencies.

Each category includes the other categories in front of it.

Table 9: Old Study vs. New Study
Cumulative ABS Credit Event Frequencies by Rating Agencies
(01/01/90 to 06/30/01 vs. 01/01/90 to 06/30/04; by number of deals; including all deals))

TYPE	Defaults		Near Defaults (and worse)		Major Downgrades (and worse)		Minor Downgrades (and worse)		Number of Deals	
	Old	New	Old	New	Old	New	Old	New	Old	New
S&P+Moody's*	9	93	11	110	75	174	85	200	2924	4712
S&P*	22	161	28	186	142	283	168	326	3388	5353
Moody's*	21	184	27	224	140	338	156	377	3517	5425
Fitch*†	31	222	40	259	161	363	179	403	2211	3473
Moody's + S&P only	4	37	5	46	17	77	18	86	1707	2474
Moody's+S&P+Fitch†	5	56	6	64	17	97	24	114	1148	2238
S&P + Fitch† only	9	64	12	71	24	100	28	105	309	436
Fitch† + Moody's only	11	86	14	99	39	135	40	147	355	449
S&P only	4	4	5	5	8	9	20	21	112	205
Moody's only	1	5	2	15	13	29	16	30	216	264
Fitch† only	6	16	8	25	9	31	11	37	293	350

* Regardless of whether rated by other rating agencies.
† Includes Duff & Phelps
Note: Each column includes the values in all the corresponding ("old" or "new") columns to its left.

Although the results reported here along the rating dimension generally agree with the results of the prior study, they are markedly different from the results of our CMBS credit migration study.[5] There, the presence of a Fitch rating was associated with generally lower frequencies of adverse credit migrations. However, in the ABS area, the presence of a Fitch rating combined with one other rating (from either Moody's or S&P) is associated with generally higher frequencies of adverse credit migrations.

IV. Problems and Limitations of the Study

In the earlier study we discussed a variety of issues that potentially limited the reliability or utility of the results reported there. We believe that those issues are just as relevant to the present study as to the old one. Therefore, even at the risk of being accused of repeating ourselves, we will restate portions of the earlier study here:

A. Units of Measurement

Deals are the units of measurement for the study. We have associated adverse credit events with deals. We chose deals as the unit of measurement largely as a matter of convenience. The database of ABS deals maintained by *Asset-Backed Alert* is organized in terms of deals. Unlike the CMBS area, comprehensive information at the security or "tranche" level is not readily available for ABS.[6]

An alternative way to organize the study would have been in terms of tranches or classes. Rating agency studies are usually framed in terms of tranches, but each rating agency usually addresses only tranches that it has rated. Rating agency databases are organized around tranches because the different tranches of a deal can carry distinct ratings. However, no single rating agency covers all the deals in the sample universe. Moreover, access to the rating agency databases is limited and strictly controlled by the rating agencies. For example, the rating agencies classify certain ratings as "private" and block access to information about those ratings. Also, information is sometimes irretrievable from rating agency databases for other reasons, such as data entry errors and the lack of standardized practices for naming deals.

We cannot say whether the results of the study would have been materially different had we counted adverse credit events by tranches rather than by deals. Nor can we say what the results would have been had we calculated them on a dollar-weighted basis by tranches.

B. Scaling of Defaults

Defaults of higher-rated securities are arguably a more serious problem than defaults of lower-rated securities. The present study captures the notion of scaling to only a limited degree. Recall that a deal receives the default classification only if it had a tranche that initially carried an *investment grade* rating (Baa3/BBB- or better) and that either experienced an actual payment default or was downgraded to default status. For purposes of the default category, we ignored defaults of any tranches that carried speculative-grade ratings at issuance (such an event would count as a minor downgrade).

However, we did not differentiate between defaults of securities that carried different initial ratings within the investment-grade range. More pointedly, the present study does not differentiate between a deal from which a triple-A-rated security defaulted and one from which a triple-B-rated security defaulted.

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[5] *CMBS Credit Migrations*, Nomura Fixed Income Research (4 Dec 2002).

[6] *Id*.

Lumping together securities within the investment-grade range creates the potential for distortions if different rating agencies issue significantly different proportions of triple-A, double-A, single-A, and triple-B ratings. The distortions generally should cancel each other out on deals rated by two or more rating agencies. However, for single-rated deals, a distortion could persist. All else being equal, a rating agency that issues a greater proportion of triple-B ratings on single-rated deals reasonably ought to experience a higher proportion of "defaults." The higher frequency of defaults would not necessarily reflect weakness in the predictive strength of the ratings. Fitch believes that the relatively high frequency of defaults on "Fitch only" deals is because Fitch issued a disproportionate share of low-investment-grade ratings on such deals. We did not observe that effect in the data, but we did not systematically test for it.

A more complicated way to have compiled and analyzed the data would have been to track the initial rating of each defaulted security (or the defaulted security with the highest initial rating in the case of a deal with multiple defaulted securities) and then to apply a "scaling factor" to each deal based on those initial ratings. For example, defaults of securities rated Baa2/BBB, A2/A, Aa2/AA, and Aaa/AAA could be scaled with factors of 1, 5, 10, and 20 (respectively) for purposes of comparing rating agency performance. That is, under such a system, a default of an A2/A-rated security would count as five default events and a default of a Aa2/AA security would count as ten default events. Results tabulated under such a system could be very different than the ones that we have presented here. We did not attempt to use such a system for three reasons. First, we did not think of it until after we already finished coding adverse credit events in the prior study. Second, we cannot say for sure what the scaling factors ought to be. Should the scaling for a triple-A default be five times or one hundred times the scaling of a triple-B default for purposes of measuring rating agency performance? Third, we wanted to preserve comparability of this study's results with those of the prior study.

C. Rescues of Troubled Deals

In theory, securitization separates asset risk from company risk. Sometimes, in practice, it does not. Issuers with substantial resources often have taken actions to rescue their deals that have gotten into trouble. The practice became so common and so widespread in the early days of the ABS market that Moody's published a report in which it was one of the major topics.[7]

While rescues have the effect of reducing the frequency of observed credit problems, their full implications are more complicated. Issuers rescue deals primarily to address poor asset performance. Although poor asset performance is an important cause of adverse credit events, it is hardly the only cause. When fraud by an issuer is the cause of an adverse credit event, the likelihood of a rescue by the issuer would be virtually zero.

Rescues are concentrated in the asset classes dominated by large, well-capitalized issuers, namely credit cards and autos. Rescues in other classes are less common, but not unprecedented.[8] One can only wonder whether the impressively low frequency of adverse credit events displayed by the credit card and prime auto asset classes (Charts 1 and 2) would still be present if it were possible to correct for the influence of rescue actions. If we enter an environment where credit card and prime auto issuers are *unable* to rescue troubled deals, it would be reasonable to expect a rise in the frequency of adverse credit events of those assets classes.

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[7] Becker, K., and Dill, A., *Bulletproof Structures Dented: Case Studies of Problem ABS Transactions*, Moody's special report (7 Mar 1997).

[8] In the home equity sector, RFC, ContiMortgage and Amresco engaged in the practice of purchasing delinquent loans out of their securitized pools. This had the effect of making the performance of their securitized pools seem better than it actually was. Other home equity issuers may have engaged in the practice as well. Dubitsky, R., and Kimmel, T., *Subprime Mortgage Loan Repurchases: Friend or Foe?*, Moody's special report (18 Dec 1998).

D. Linkage of Asset Risk and Company Risk[9]

The performance of securitized assets can be linked to the business fortunes of an issuer in ways other than the rescues described above. In addition, the survival of a deal depends strongly on the integrity of the deal's participants. Wherever there is such a linkage, the presence or absence of adverse credit events may be more a reflection of the originator than the assets. The asset classes characterized by higher degrees of linkage include healthcare receivables, equipment leasing and retail credit cards. Many of the most damaging ABS defaults arguably stem from company risk.

E. Equivalence of Rating Scales

The study's classification of deals (*i.e.,* default, near default, major downgrade, and minor downgrade) relied, in large measure, on rating agency ratings. For purposes of the study we have *assumed* congruence of the rating scales of all the rating agencies. That is, "Aaa" on Moody's scale reflects the same degree of credit risk as "AAA" on Standard & Poor's scale and "AAA" on the Fitch scale, and so on.

With respect to corporate ratings, there is academic support for the presumption of congruence between Moody's and Standard & Poor's rating scales. [10] However the same authorities conclude that congruence does not extend to the rating scales of other rating agencies. Those authorities assessed the congruence of rating scales by considering cases of securities with split ratings. Where there were numerous cases of split ratings and one rating agency's ratings were higher than another's most of the time, the researchers concluded that the rating scales of the two agencies were not congruent. In the structured finance area, there are fewer instances of split ratings and there have not been academic studies on the question of congruence.

National Economic Research Associates (NERA) published a study of structured finance ratings last year. [11] NERA could not reject the hypothesis that ratings from different rating agencies perform differently. However, NERA could not reject the converse either. We found the NERA study to be disappointingly inconclusive.[12]

If the assumption of rating scale congruence were materially wrong, it arguably would introduce a distortion of indeterminate magnitude to the study's results. Although the magnitude of the potential distortion is impossible to gauge, its direction would be obvious.

F. Instability of Rating Practices

Predictive relevance of the study results implicitly relies on the presumption that rating agency practices and standards remain stable over time. There is conflicting evidence on this score. The rating agencies have stated that the risk content of traditional corporate bond ratings is the touchstone against which structured finance ratings are calibrated; with the goal of achieving the same credit risk in a triple-A-rated structured finance security as in a triple-A-rated corporate security.

Some market participants have argued strongly that the rating agencies were too conservative in their early structured finance rating efforts. Those market participants pointed to the strong performance

[9] *U.S. Fixed Income 2003 Mid-Year Outlook/Review*, Nomura Fixed Income Research at 62-64 (27 Jun 2003); *ABS Gold Coast Report: Coverage of Selected Sessions of ABS East 2003*, Nomura Fixed Income Research at 1, 6-7 (20 Oct 2003) ; *Report from Arizona 2004: Coverage of Selected Sessions of the Winter Securitization Conferences*, Nomura Fixed Income Research at 37 (10 Feb 2004).

[10] Cantor, R. and Packer, F., *The Credit Rating Industry*, 19 FRBNY Q. REV. 1, 4 (Summer-Fall 1994); Beattie, V. and Searle, S., *Bond Ratings and Inter-Rater Agreement*, J. OF INT'L. SECS. MARKETS 167, 170 (Summer 1992).

[11] Carron, A.S., et al., *Credit Ratings for Structured Products – A Review of Analytical Methodologies, Credit Assessment Accuracy, and Issuer Selectivity among Credit Rating Agencies*, National Economic Research Associates (6 Nov 2003).

[12] *NERA Study of Structured Finance Ratings – Market Implications*, Nomura Fixed Income Research (6 Nov 2003).

of structured finance securities during their early years as evidence that the rating agencies were too conservative.

On the other hand, the strong performance during the early years of the securitization market may have prompted the rating agencies to soften their standards in some areas. This arguably occurred in the residential MBS area, where credit enhancement levels on jumbo mortgage deals declined.[13] More recently, however, the rating agencies may be moving the other way in certain areas. For example, they have embraced new interest rate assumptions for analyzing sub-prime mortgage deals[14] and they have presented concrete analytics for addressing correlation in CDOs.[15]

Thus, overall, it seems likely that the implicit assumption of the stability of rating practices is wrong. Nonetheless, even though the predictive relevance of the study's results may be diminished, the magnitude of that diminution may not be too severe if policy shifts at the rating agencies tend to move together.

G. Biased Sample Period

The study covers the period from 1 January 1990 through 30 June 2004 and includes only deals issued during that period. Nearly the entire sample period was a time of economic expansion. This has the effect of biasing the sample and making it difficult to extrapolate what the frequency of adverse credit events would be during harder times.

Someday, it may be possible to conduct a study that covers a more evenly balanced sample period. For now, all we have is the still-brief history of the ABS market since its inception in 1985 and its maturation through the 1990s and early 2000s.

H. Average Life

The longer a security is outstanding the more opportunity it has to experience difficulties. Accordingly, all other things being equal, asset classes financed predominantly with short-average life securities ought to display lower frequencies of adverse credit events on average. We did not rigorously test this hypothesis. Our "eyeball" impression of the data suggests that the hypothesis appears reasonable.

I. Cumulative Experience

Similarly, asset classes that generated deals over longer periods of time (*i.e.*, from the early days of the ABS market) ought to have experienced a higher frequency of adverse events, all other things being equal. The study results absolutely do not bear out this expectation. Prime autos and cards are the asset classes with the longest history and yet both have low frequencies of adverse credit events. The emergence of the "other" asset category as a significant portion of the total market is a more recent phenomenon.

J. Fraud

Certain market participants have alleged fraud as a key underlying cause of certain ABS defaults including the deals from NCFE, Towers, DVI, CFS, Autobond, and Hollywood Funding. One way of

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[13] *U.S. Fixed Income 2004 Mid-Year Outlook/Review*, Nomura Fixed Income Research at 51 (1 Jul 2004) (includes a graph showing how decline in quarterly average AAA credit enhancement levels for S&P-rated jumbo FRM30 deals).

[14] Osterweil, T., et al., *Criteria for U.S. RMBS Interest Rate Vectors Revised*, Standard & Poor's special report (29 Jul 2004) (effective for transactions rated after 1 Nov 2004); Kornfeld, W., *U.S. Subprime Mortgage Securitization Cashflow Analytics*, Moody's special report (17 Mar 2004).

[15] Witt, G., *Moody's Correlated Binomial Default Distribution*, Moody's Special Report (10 Apr 2004); *Global Cash Flow and Synthetic CDO Criteria*, Standard & Poor's at 44 (21 Mar 2002); Hrvatin, R. and Peng, M., 2003. *Default Correlation and Its Effect on Portfolios of Credit Risk*, FitchRatings (20 Feb 2003).

analyzing frequencies of adverse credit events across rating agencies would be to exclude deals where adverse credit events are attributable to fraud. We have not done so in our study. From an investor's standpoint, a default attributable to fraud hurts no less than one attributable to anything else. Moreover, in certain cases, it remains open to debate whether fraud was the primary cause of default, a contributing factor, or not a factor at all. Lastly, all participants in the ABS market, including investment bankers, lawyers, accountants, issuers, trustees, investors, and the rating agencies, have an interest in promoting the use of safeguards and structures that inhibit fraud.[16] For example, following the Towers defaults, there was a notable burst of focus on the issue of preventing fraud by enlisting greater involvement from deal trustees. After the NCFE defaults, there was another period of intense focus, but so far the market has yet to embrace effective safeguards.

V. Conclusions

The results of the present study largely ratify the generally perceived tiering of asset classes and rating combinations. That is, deals from asset classes that display notably higher frequencies of adverse credit migrations tend to command somewhat wider spreads. Likewise, deals rated by combinations of rating agencies associated with higher adverse migration frequencies also tend to command wider spreads.

The present study detected a notable weakening trend in ABS vintages from 1993 through 1998 (Charts 3 and 4). We had not spotted that trend in our earlier study because we had not examined performance along the vintage dimension. The progressively increasing frequency of adverse credit migrations through the mid-1990s vintages arguably is the study's most significant finding. However, it raises some difficult questions: What caused the weakening trend? Did it reflect a temporary shift in performance or a secular change? More importantly, will newer vintages (2001-2004) perform like the vintages from the mid- to late-1990s or will they perform better? We don't have answers for those questions. We expect that the answers will have to wait for several years, when actual experience reveals the outcome.

For most of this year, the general mood of the ABS market has been very positive. We described the atmosphere of the February conferences as optimistic and the mood of ABS East as exuberant. The discernable pattern of vintage performance suggests that the market should temper its outlook. *Cautious* optimism seems reasonable to us.

The study's practical implications are virtually self-evident. Investors should demand an appropriate risk premium for deal types associated with higher frequencies of adverse credit migrations, either because of their underlying asset class or because of their combination of ratings. However, during periods of strong optimism or exuberance, ABS investors may not be able to actually get the premiums that they deserve.

[16] *Red Flags for Non-Investment Grade Seller/Servicers*, Fitch Research (2 Apr 1997) (Fitch doc. no. 12672); *Red Flags for Private Placement Issuers*, Fitch Research (17 Jul 1995) (Fitch doc. no. 5446); *Rating Guidelines for Health Care Receivables*, Fitch Research (20 Apr 1998).

Appendix A – Selected ABS Defaults

The prior study included stories on the following ABS defaults:

- Towers Financial Healthcare Deals
- CFS Charged-off Credit Card Deals
- Hollywood Funding Nos. 4, 5, and 6
- Heilig-Meyers Private-Label Credit Card Deals
- LTV Steel Trade Receivable and Inventory Deals
- Autobond Acceptance Corp. Subprime Auto Deals
- IMC Mortgage Co., Home Equity Loan Trust 1997-5
- Southern Pacific Secured Assets Corp Series 1997-2
- Cityscape
- ContiMortgage Home Equity Loan Trust, Series 1997-1, 1997-2, 1997-3, and 1997-4
- Franchise Mortgage Acceptance Co.

This report includes stories on the following ABS defaults:

- Most important default stories
  - Manufactured Housing (sector)
  - Aircraft (sector)
  - Franchise Loans (sector)
  - NCFE Healthcare ABS
  - DVI Equipment Lease ABS
  - Spiegel/First Consumers Credit Card ABS
  - NextCard Credit Card ABS
- Other default stories
  - Amresco Residential Securities Corp. 1998-1
  - Conseco Finance Vehicle Trust 2000-B
  - Delta Funding Home Equity Loan Trust 2000-4
  - GE Capital Mortgage Services
  - ICON Equipment Lease Grantor Trust 1998-A
  - IMC Home Equity Loan Trust 1997-3, 1997-5 and 1998-1
  - IndyMac Home Equity Loan Trust 2001-A
  - Lehman Home Equity Loan Trust 1998-1
  - Metropolitan Asset Funding Inc. II 2000-A
  - Salomon Brothers Mortgage Securities VII 1998-AQ1
  - Soundview Home Equity Loan Trust 2001-1
  - T&W Funding 1997-A, 1998-A, 1998-B, and 1999-A
  - The Money Store Home Equity Trust 1998-A
  - UniCapital 1999-1 and 2000-1

1. Manufactured Housing[17] (107 defaults)

Manufactured housing (MH) ABS have suffered the most of any major sector on the ABS landscape. As of now, most of the sector's outstanding deals have suffered a default or downgrade. Experts probably will never entirely agree on what brought the sector to ruin. Here's our view on the matter:

The MH sector was partly a victim of its own success. In the late 1980s and early 1990s, Green Tree established itself as the dominant player in the area. The company's apparent success was lauded by financial professionals nationwide. Larry Coss, Green Tree's CEO, was reportedly the highest paid executive in the country in 1996, earning more than $100 million for the year.

[17] Conroy, C., *U.S. Manufactured Housing ABS Turbulent Times*, S & P research report (30 May 2002); Person, D. and Reddy, T., *Manufactured Housing Industry Update*, Moody's special report (25 Nov 2003); Potolsky, J. and Tilwitz, K., Manufactured Housing Loan Portfolios: Where Are They Now?, Fitch special report (2 May 2002).

Manufactured Housing ABS Defaults	
Issuer	**Series**
BankAmerica MH Contract Trust (BAMH)	1996-1; 1997-1; 1997-2
Bombardier Capital Mtg. Securitization (BCM)	1998-B; 1999-B; 2000-A
Conseco Finance Securitization Corp. (CNF)	1999-6; 2000-1; 2000-2; 2000-3; 2000-4; 2000-5; 2000-6; 2001-1; 2001-2; 2001-3
Deutsche Financial Capital Securitization LLC (DFCS)	1997-1; 1998-1
Green Tree Financial Corp. (GT)	1993-4; 1994-1; 1994-2; 1994-3; 1994-4; 1994-5; 1994-6; 1994-7; 1994-8; 1995-1; 1995-2; 1995-3; 1995-4; 1995-5; 1995-6; 1995-7; 1995-8; 1995-9; 1995-10; 1996-1; 1996-2; 1996-3; 1996-4; 1996-5; 1996-6; 1996-7; 1996-8; 1996-9; 1996-10; 1997-1; 1997-2; 1997-3; 1997-4; 1997-5; 1997-6; 1997-7; 1997-8; 1998-1; 1998-2; 1998-3; 1998-4; 1998-5; 1998-6; 1998-7; 1998-8; 1999-1; 1999-2; 1999-3; 1999-4; 1999-5
Green Point Credit Mfg'd Housing Contract (GPMH)	1999-5; 2000-1
Indy Mac Mfg'd Housing Contract (INDMH)	1997-1; 1998-1; 1998-2
Merit Securities Corp. (MESC)	12-1; 13
Oakwood Mortgage Investors Inc. (OMI Trust) (OAK)	1997-A; 1997-B, 1997-C; 1997-D; 1998-A; 1998-B; 1998-C; 1998-D; 1999-A; 1999-B; 1999-C; 1999-D; 1999-E; 2000-A; 2000-B; 2000-C; 2000-D; 2001-B; 2001-C; 2001-D; 2001-E; 2002-A; 2002-B; 2002-C
Origen Mfg'd Housing Contract (ORGN)	2001-A
UCFC Mfg'd Housing Contract Trust (UCFCM)	1996-1; 1997-1; 1997-2; 1997-3; 1997-4; 1998-1; 1998-2

Not surprisingly, other companies flocked to the sector in the hopes of reaping big returns. New market entrants included Bombardier Capital, Deutsche Financial Services, Indymac, Oakwood, and United Companies.

Part of how Green Tree had *seemed* to succeed had been through using "gain-on-sale" accounting. When the gains turned out to be illusory, the company had to reverse previously recognized income. Eventually, the financial deterioration associated with reversing the previously booked income killed the company – it could not sustain itself as an independent entity and Conseco acquired it in 1998.

By attracting so many new entrants to the sector, Green Tree had unwittingly created a fiercely competitive environment. In order to retain or increase market share, MH lenders repeatedly relaxed their lending standards. For example, many started to offer 30-year loans and required only trifling down payments by buyers of manufactured homes. In fact, some started refinancing loans on existing homes.

Meanwhile, the combined impact of gain-on-sale accounting and relaxed lending standards quickly began to affect both securitizations and lender profitability. Companies started to abandon the sector that they had flocked to just a few years earlier. Indymac, United Companies, Deutsche Financial Services, Bombardier, and Green Point all exited the MH origination business. Others were forced to seek bankruptcy protection: United Companies filed in March 1999[18] and Oakwood Homes followed suit in November 2002.[19] Conseco Financial (the renamed Green Tree operation) felt the pressure as well. In December 2002, the company filed for bankruptcy in the third-largest bankruptcy in U.S. history.[20]

[18] Feldheim, D. and Tempkin, A., *Moho Suffers Body Blow*, Asset Securitization Report (21 Jun 1999).

[19] Donovan, K., *Bankrupt Oakwood to Offer B2 ABS Holders One-Third Equity Stake*, Asset Securitization Report (25 Nov 2002).

[20] *In re Conseco, Inc., et al.*, No. 02-49672 (Bankr. N.D. Ill.); *Conseco Files for Chapter 11, Third Largest Bankruptcy Ever in U.S.*, USA Today Online Article (18 Dec 2002).

The bankruptcies of several manufactured housing issuers directly affected certain classes of their securitizations. Most MH securitizations included a "B-2" class that used a corporate guarantee from the issuer as credit enhancement. Most of the MH deals classified in the default category received that classification solely because of downgrades to their B-2 tranches. In addition, many ABS deals from Green Tree/Conseco backed by other types of assets (*e.g.*, home equity loans, home improvement loans, or recreational vehicle loans) received default classification for the same reason.

MH lender bankruptcies hurt servicing operations. In particular, Conseco Financial's bankruptcy hurt its dealer relationships and impaired its ability to dispose of repossessed units through dealer networks. At the same time, low interest rates increased the affordability of regular homes, depressing demand for manufactured homes. Both these factors conspired to depress recovery rates on repossessed manufactured homes.

High frequencies of borrower defaults combined with weak recoveries on repossessions quickly produced problems in many MH ABS deals. Conseco Financial's bankruptcy added an additional wrinkle. As the performance of the underlying assets deteriorated, the servicing fees in Conseco's deal dwindled because they were subordinated to the securities. Also, the most subordinate classes of the deals carried corporate guarantees from Conseco. Conseco's "servicing platform" was sold in the bankruptcy proceeding. The holders of the subordinate classes received a claim against Conseco's estate. The company managed to convince the bankruptcy court to restructure the servicing fee. The court moved the servicing fee to the top of the cash flow waterfall and increased it to 125 basis points (declining to 115 bps). The securitization trusts were never brought into the bankruptcy proceeding. However, the judge allowed the securitization investors to argue for their interests. The biggest shock from the Conseco case was not the deterioration of the assets but rather the re-writing of the waterfall.

It remains to be seen when the manufactured housing ABS sector will be able to resurrect itself. Before that can happen, lenders will need to adhere to sensible lending standards that correct the mistakes of the 1990s.

2. Aircraft (6 defaults)

The proximate cause of the troubles in the aircraft ABS sector was the events of 9/11/01. Air travel declined. As a result, there were high levels of lease defaults, lease renegotiations, and aircraft repossessions, which together adversely affected the cash flows of many transactions.[21] However, the underlying causes are older, namely geopolitical conflict and terrorism. In our opinion, those causes produced strong correlation effects throughout the entire aviation industry. If the rating agency analyses had properly reflected real world correlations, the deals might have had sufficient credit enhancement to withstand the real-world stresses to which they were subjected.

Aircraft ABS Defaults

Issuer	Series	Comments
Air 2 US		Class C: Baa1/---/BBB to **C**/---/CC
Aircraft Lease Portfolio Securitization	1996-1	Class C: Baa2/BBB to **Ca**/CCC
Airplanes Pass Through Trust	1; 1R	Class B: A2/A to Ca/**D**
Embarcadero Securitization Trust	2000-A	Class B: A2/A/A to **Ca**/**D**/C
Pegasus Aircraft Lease Securitization	2000-1	Class C1: ---/---/BBB to ---/---/**D**
Triton Aviation Finance	1A	Class B1: A2/A/A to Caa1/**D**/CC

In some cases, the stress to the sector forced companies into bankruptcy. The bankruptcies, in turn, appear as significant milestones on the path to default for a number of aircraft ABS deals. For example, Air 2 US was affected by the Chapter 11 bankruptcy filed by United Airlines in December

[21] Burbage, T., et al., *Ratings Lowered in Global Aircraft Operating Lease-Backed Securitizations; Outlook Negative*, S&P press release (5 Jun 2003).

2002.[22] Pegasus Aviation[23] and Triton Aviation Finance[24] also suffered as a result of their bankrupt lessees.

The composition and quality of the aircraft was another key determinant in the performance of the overall cash flows of the securitizations. Transactions that relied upon older vintage aircraft were at a disadvantage to the transactions that were heavily concentrated in the more efficient and modern models. This is partly because maintenance costs were higher for the older and obsolete aircraft. Aircraft Lease Portfolio Securitization, Airplanes Pass Through Trust, and Embarcadero Securitization Trust were all transactions that suffered from exposure to older aircraft.

3. Franchise Loans (17 defaults)

The franchise loan ABS sector as a whole has experienced a very high frequency of defaults on investment-grade-rated tranches. Many factors arguably combined to cause trouble for the sector. However, the single most important one probably was lenders' practice of treating the "business value" of a franchise as additional collateral beyond the primary real estate collateral backing most loans. Doing so produced higher advance rates and weaker loans. In essence, it amounted to overly aggressive underwriting.

Franchise Loan ABS Defaults

Issuer	Series
ACLC Business Loan Rec. Trust (ACLB)	1999-1; 2000-1
Atherton Franchisee Loan Funding (AFLF)	1999-A
Captec Franchise Trust (CFT)	1999-1
EMAC Owner Trust	1998-1; 1999-1; 2000-1
FFCA Secured Lending Corp. (FFCA)	2000-1
Franchise Mortgage Acceptance Corp.	1996-B; 1997-B; 1997-C; 1998-A; 1998-B; 1998-C
Franchise Loan Receivables Trust (FLT)	1998-1
Global Franchise Trust (GFT)	1998-1
Peachtree Franchise Loan LLC (PEACH)	1999-A

In addition to treating "business value" as addition collateral, other aggressive lending practices included unrestricted use of proceeds, non-recourse financing, and weak covenants and reporting requirements.[25] Primary blame for the sector's problems rests squarely on the lenders. However, other market participants who touted the "business value" story rightly should share some of the blame as well. The heart of the issue is that market participants broadly may have failed to appreciate the real character of the assets at the inception of the deals. The poor performance of certain deals has sparked litigation and allegations of fraud.[26] Some now claim that stronger checks and balances combined with tougher due diligence and ongoing independent oversight could have prevented the sector's disappointments.

4. NCFE – National Century Financial Enterprises (12 defaults)

The NCFE episode is the worst group of defaults ever to hit the ABS market. Half of the defaulting bonds by number – and substantially more than half by dollar volume – initially carried triple-A ratings. Moreover, once problems were discovered, the ratings fell to the default range in less than a month. Ultimate losses to investors likely will be in the range of $2 billion to $3 billion.

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[22] Weill, N. and Eisbruck, J., *Moody's Downgrades Air 2 US Aircraft Enhanced Equipment Notes*, Moody's press release (11 Feb 2003).

[23] Ozgediz, P., *Moody's Places Notes Issued by Pegasus Aviation Lease Securitization I, II, and III Under Review For Possible Downgrade*, Moody's press release (12 May 2004).

[24] Powell, D., *Fitch Ratings Downgrades Triton Aviation Finance*, Fitch press release (28 Apr 2004).

[25] Wells, W., et al., *Fitch's Franchise Loan Criteria Update*, Fitch special report (18 Dec 2001).

[26] Gregory, M., *EMAC Suit is Now Class Action*, Asset Securitization Report (24 Jun 2002).

National Century Financial Enterprises (NCFE) filed for bankruptcy in November of 2002.[27] Previously, the company had completed dozens of purported healthcare securitizations. At the time of the company's bankruptcy, it had outstanding deals issued through two special purpose entities: NPF VI and NPF XII (Bloomberg[SM] tickers NPF6 and NPF12). The company and its principals have been accused of fraud in connection with those deals. Roughly $3.35 billion of outstanding securities have defaulted,[28] and estimates of ultimate losses to investors have run higher than 85%. The main component of the alleged fraud is that collateral for the deals either was ineligible or did not exist. The revolving nature of the collateral pools combined with the absence of meaningful third-party oversight arguably enabled NCFE to perpetrate that aspect of the fraud. A secondary aspect of the NCFE fraud involves the improper transfers between the reserve funds for the NPF VI and NPF XII deals. Investors have alleged that the trustees for the two special purpose entities should have prevented the improper transfers of the reserve fund balances.

NCFE Healthcare Receivable ABS Defaults

Trust	Series	Issuance Date	Deal Size ($ millions)	Rating Agencies		
				Moody's	S&P	Fitch
NPF VI	1998-2	08/10/98	125	✓		✓
	1998-4	11/2/98	50	✓		✓
	2002-1	02/27/02	250	✓		
NPF XII	1999-1	03/10/99	100	✓		✓
	1999-3	11/24/99	200	✓		✓
	2000-2	10/13/00	275	✓		✓
	2000-3	12/19/00	150	✓		
	2001-1	03/20/01	300	✓		✓
	2001-2	06/21/01	250	✓		✓
	2001-3	10/31/01	150	✓		
	2001-4	11/16/01	150	✓		
	2002-1	05/29/02	250	✓		

Note: In addition, NCFE obtained up to $1.1 billion of funding through variable funding certificates (VFCs). The VFCs were designated NPF VI series 2001-1 and NPF XII series 2000-4. Moody's appears to have initially rated both VFCs Aa2.

An important development in 2003 was a new lawsuit by investors against the placement agent, the trustees, and others.[29] Interestingly, the suit alleges that the placement agent misled investors with a research report. The research report challenged Fitch's downgrade of the NCFE securities on 12 July 2002.[30] However, the research report's findings were bolstered by Moody's confirmation of its ratings on the NCFE securities just two weeks later.[31] The litigation has the potential to change business practices in the securitization market. If the trustees are found liable, fees for trustee services on securitizations could increase substantially. Likewise, if the placement agent is found liable, due diligence practices for securitizations could become more onerous. This litigation remains an important one for market participants to watch.

Additionally, investors have sued one of the trustees, claiming that the trustee breached its fiduciary duty following the default of the NCFE securities. The trustee allegedly conducted an investigation

[27] *In re National Century Financial Enterprises*, No. 02-65235 (Bankr. S.D. Ohio); Selected court documents on the bankruptcy case are available online at http://www.ncfe.com.

[28] Black, W., *Moody's Downgrades Notes Issued by National Century-Sponsored Programs, NPF VI and NPF XII*, Moody's press release (22 Nov 2002).

[29] *City of Chandler v. Bank One*, No. CV2003-010173, (Ariz. Superior Ct. Maricopa County, *filed* 23 May 2003); Michael Gregory, *Research Lawsuits Hit ABS at Last*, Investment Dealers Digest, 2 June 2003, at 7.

[30] *Fitch Ratings Downgrades Various NPF VI & NPF XII Series*, Fitch press release (12 July 2002); Credit Suisse First Boston, *Fitch Downgrades NPF Healthcare Deals*, Market TABS, 15 July 2002, p.5; *City of Chandler*, complaint ¶¶ 123-125 (23 May 2003).

[31] *Moody's Affirms Ratings of National Century Healthcare Receivable-Backed Transactions*, Moody's press release (1 Aug. 2002).

following the default, but the purpose of the investigation may have been to protect its own interests rather than the interests of investors.[32]

The first half of 2004 brought progress in the ongoing NCFE saga. The bankruptcy court approved NCFE's disclosure statement on January 7 and its liquidation plan on April 16. Investors in the senior tranches of NCFE's healthcare receivable-backed ABS reportedly will recover between 12% and 14% on their securities from the bankruptcy proceeding.[33] Holders of subordinate tranches are expected to get nothing.

Recently, the former CFO of NCFE, John Snoble, pled guilty to charges stemming from NCFE's fraudulent activities.[34] Two other NCFE executives, Sherry Gibson and Brian Stucke, previously pled guilty. Gibson was sentenced to four years imprisonment and ordered to liquidate all her assets for restitution. Stucke is awaiting sentencing. Snoble faces up to five years in prison and mandatory restitution.

A bright spot in the NCFE story is the fact that both the bankruptcy court and (ultimately) the creditors respected the individual corporate identities of NPF VI and NPF XII. That is, the liquidation plan does not call for "substantive consolidation" of the special purpose entities with NCFE.[35]

The NCFE debacle was primarily a fraud situation. It vividly illustrates that ABS can be vulnerable to fraud by a seller or servicer. Deals backed by revolving pools of assets are particularly vulnerable because due diligence at the inception of a deal cannot verify the existence or quality of assets that revolve into the underlying pool after the deal's closing date. Accordingly, a key lesson from NCFE ought to be that revolving deals should have strict ongoing oversight and audits by independent third parties – deal cops.

5. DVI (8 defaults)

DVI, Inc. was an equipment leasing company that specialized in leasing medical equipment. Between 1994 and 2003, DVI issued 16 transactions backed by medical equipment leases. In two deals, 2001-1 and 2001-2, tranches that initially carried triple-A ratings were downgraded to default status. In six of the other deals, tranches that initially carried double-A ratings were downgraded to default status.

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[32] Disclosure Statement, 13 Jan 2004, at 36, *In re National Century Financial Enterprises*, No. 02-65235 (Bankr. S.D. Ohio) (listing of actions commenced by or on behalf of noteholders).

[33] St. Onge, J., *National Century Wins Court Approval for Liquidation (Update 2)*, Bloomberg News, (16 Apr 2004).

[34] Office of the United States Attorney Southern District of Ohio, *Upper Arlington Man Admits Money Laundering Conspiracy–Participant in multi-billion dollar fraud at NCFE*, press release (17 Nov 2004) (http://www.asreport.com/assets/articles/12534/Snoble%20--%20DOJ%20release.pdf); Dunn, A., F*ormer National Century Finance Chief Pleads Guilty*, Bloomberg News (17 Nov 2004).

[35] Fourth Amended Joint Plan of Liquidation of National Century Financial Enterprises and its Debtor Subsidiaries, 13 Jan 2004, at 6, *In re National Century Financial Enterprises*, No. 02-65235 (Bankr. S.D. Ohio) (definition of "NCFE Consolidated Debtors")

DVI Equipment Least ABS Defaults							
Series	Issuance Date	Deal Size ($ millions)	Defaulted Class	Original Class Size	Initial Ratings		
					Moody's	S&P	Fitch
1999-2	10/25/99	262.1	B	4.1	Aa3		AA
			C	8.1	A2		A
			D	5.4	Baa2		BBB
			E	6.6	Ba2		B
2000-1	05/08/00	276.4	B	4.4	Aa3		AA
			C	8.8	A2		A
			D	5.9	Baa2		BBB
			E	7.3	Ba2		BB
2000-2	11/13/00	258.6	B	4.1	Aa3		AA
			C	8.2	A2		A
			D	5.5	Baa2		BBB
			E	6.8	Ba2		BB
2001-1	05/08/01	315.3	A3	82.5	Aaa		AAA
			B	4.9	Aa3		AA
			C	9.8	A2		A
			D	6.5	Baa2		BBB
			E	8.1	Ba2		BB
2001-2	11/05/01	406.0	A3	122.0	Aaa		AAA
			B	6.4	Aa3		AA
			C	12.8	A2		A
			D	8.59	Baa2		BBB
			E	10.7	Ba2		B
2002-1	05/03/02	441.1	B	6.8	Aa3		AA
			C	13.6	A2		A
			D	9.1	Baa2		BBB
			E	11.4	Ba2		BB
2002-2	11/08/02	487.0	D	9.3	Baa2		BBB
			E	11.6	Ba2		BB
2003-1	05/16/03	451.2	C1	5.7	A1	A	A
			C2	9.0	A1	A	A
			D1	6.3	Baa2	BBB	BBB
			D2	5.0	Baa2	BBB	BBB
			E1	9.3	Ba2	BB	BB
			E2	2.0	Ba2	BB	BB

DVI went into bankruptcy on 26 August 2003.[36] In October, the bankruptcy court appointed R. Todd Neilson (of Neilson Elggen LLP) to be the "examiner" in the proceedings. Neilson delivered a nearly 200-page report in early April.[37] The report accuses DVI of serious improprieties in connection with its securitization of medical equipment leases. In particular, it alleges that DVI consciously (i) double-pledged assets, (ii) used ineligible or "out-of-compliance" collateral to obtain advances from Fleet, the provider of one of its main credit lines, and (iii) practiced "round-trip financing." Neilson asserts that DVI engaged in fraudulent activity from 1999 through May 2003.

6. Spiegel/First Consumers (2 defaults)

First Consumers National Bank (FCNB) was a finance subsidiary of clothing retailer Spiegel. In 1999 and 2001, FCNB issued two securitizations backed by sub-prime and secured Visa/Mastercard receivables (FCCT 1999-A for $250 million and FCCT 2001-A for $561 million). The class B securities of each deal carried initial ratings of A2/A and subsequently suffered downgrades to Ca/CCC. The senior classes started at triple-A and subsequently fell to speculative-grade territory.

[36] DVI, Inc., Current Report on Form 8-K (26 Aug 2003).

[37] DVI, Inc., Current Report on Form 8-K, Exhibit 99.1 (8 Apr 2004) (Report of Chapter 11 Examiner Todd Neilson prepared in connection with *In re DVI, Inc.*, No. 03-12656 (Bankr. D. Del. 2003)).

In September 2003, Spiegel released an "Independent Examiner's Report" revealing that the company had made material misstatements and omissions in the sales of credit card ABS and that it had manipulated interchange rates to improperly avoid breaching excess spread triggers.[38] The deception committed by Spiegel is important because it serves as a reminder that even a seemingly reputable enterprise may commit fraud under conditions of financial distress.

In 2000 and 2001, Spiegel issued two series of ABS backed by its private-label credit card receivables (SPMT 2000-A and SPMNT 2001-A). Each deal was for $600 million. The triple-A ratings on those deals were based on surety bonds from MBIA Insurance Corp.

In February 2001, the declining performance of Spiegel's private-label card portfolio was threatening to violate the excess spread (base rate) early amortization trigger. To avoid this, Spiegel decided to manipulate the trigger calculation in order to prevent early amortization. Spiegel raised the interchange rate to 5% for purposes of calculating excess spread, but kept it unchanged for other purposes. Spiegel did not want the interchange rate increase to have a "real world impact" on its merchants. So, instead of having the merchants pay the increase, Spiegel offset the increase by having the merchants charge FCNB added "marketing charges." In effect, the increase would not affect Spiegel's merchant units, but would enable Spiegel to report a higher yield and higher excess spread in its securitization trusts. This would avoid a trigger violation.

Between April 2001 and February 2002, charge-offs continued to rise and excess spread continued to shrink in both the Spiegel private-label card trust and the FCNB Visa/MasterCard trust. On 12 February 2002, Spiegel announced that it planned to sell its credit card business, including FCNB.

On 10 April 2002 MBIA declared a "payout event" for both of the private-label deals that it had insured. The basis for MBIA's action was that Spiegel had classified first payment defaults as fraud losses rather than as credit losses (similar to NextCard, see below). MBIA claimed that the reclassification caused the trust to trip its triggers. The next day, Spiegel obtained a temporary restraining order to prevent MBIA from enforcing the payout event. Spiegel eventually settled with MBIA agreeing to drop its litigation in exchange for MBIA retracting its declaration of a payout event.

In May 2002 the rating agencies started downgrading the FCNB deals. Bond insurance on the Spiegel private-label deals prevented those deals from suffering downgrades.

In early 2003, Spiegel/FCNB agreed with the Office of the Comptroller of the Currency (OCC) to sell or liquidate the FCNB credit card portfolio by 30 April 2003. The company also agreed that if it could not sell the portfolio, it would be liquidated as part of FCNB's liquidation.

On 7 March 2003 FCNB closed its Visa/Mastercard accounts. This was a critical event because cardholders could no longer use their cards to make purchases. The trust became a liquidating pool of receivables and no longer benefited from new purchases.

During the week of March 10, Spiegel announced that it was closing its private-label card accounts. The FCNB deals and the Spiegel private-label deals entered early amortization after three months of negative excess spread. Spiegel announced that it might have to seek bankruptcy protection.

On 17 March 2003 Spiegel filed for bankruptcy protection. FCNB notified the trustee of its deals that it would resign as servicer. At the time, no back-up servicing arrangements had been made.

Around the same time, the OCC issued an order requiring FCNB to replace itself as servicer of the card portfolio by June 30, 2003. The OCC ordered Spiegel to raise the servicing fees on its card portfolios to the greater of the actual cost of servicing or 3.5%. Previously the servicing fee had been

[38] Spiegel, Inc., Current Report on Form 8-K, Exhibit 99-2, Independent Examiner's Report (12 Sep 2003) (the Independent Examiner's Report was prepared in connection with *S.E.C v. Spiegel, Inc.*, No. 03 C 1685 (N.D. Ill. 5 Sep 2003)).

just 2%. The actual cost of servicing was reportedly in the 7% range. The OCC's consent order specified interim servicing fees for the private-label deals and for the FCNB deals as follows:[39]

Spiegel/FCNB Interim Servicing Fees Ordered by the OCC		
	Spiegel Private-Label	FCNB Visa/MasterCard
April 2003	6%	7%
May 2003	5%	6%
June 2003	4%	5%

By raising the servicing fees, the OCC sought to avoid a repeat of the NextCard debacle, where the FDIC failed to find a replacement servicer for an amortizing credit card portfolio.

The Spiegel/FCNB deals arguably are the most "instructive" of all the ABS defaults. The deal suffered a wide array of challenges: (1) servicing fees too low to attract a successor servicer, (2) regulatory intervention to raise servicing fees, (3) declining pool in early amortization, (4) early amortization delayed by the issuer, (5) "fraud losses" reclassified as "credit losses" by regulators, (6) manipulation of triggers, (7) servicer misappropriation of collections, and (8) securities fraud in sale of ABS. Accordingly, the lessons from the Spiegel/FCNB experience are numerous: (a) contractual early amortization triggers may not work, (b) the "declining pool" scenario can happen, (c) without audits or third-party oversight, an ABS servicer in financial distress may manipulate triggers, divert cash flows, or otherwise misappropriate assets, (d) the performance of securitized assets can be tightly linked to the business fortunes of the issuer, (e) a deal's servicing fee must be large enough to attract a successor servicer, (f) a regulator can increase the servicing fee in an ABS deal, (g) fraud risk is real and investors should demand protective features in the deals that they buy, and (h) no transaction is "bankruptcy proof"

7. NextCard (2 defaults)

NextCard issued two series of securities from its credit card master trust, series 2000-1 (NCMNT 2000-1A) in December 2000 and series 2001-1 (NCMNT 2001-1A) in May 2001. The class C tranches of each deal initially carried ratings of triple-B, but were ultimately downgraded to default status.

NextCard Inc. operated as an online issuer of Visa credit cards to consumers. In the fall of 2001, the regulators forced NextCard to reclassify as "credit losses" certain losses that it had previously booked as "fraud losses." The reclassification of losses made NextCard's securitizations ineligible for "low-level recourse treatment" under bank capital regulations. The result was that, as of 30 September 2001, NextCard became a significantly undercapitalized institution.[40]

NextCard's situation failed to improve over the following months and, on 7 February 2002, the Office of the Comptroller of the Currency (OCC) closed the bank and appointed the FDIC as receiver.[41] The FDIC promptly notified the trustee for NextCard's securitizations that an "early amortization based solely on the insolvency or the appointment of the FDIC as receiver is not enforceable against the FDIC."[42] The FDIC's stated purpose in not allowing the early amortization was to "buy time and find a buyer for the portfolio."

[39] In the matter of First Consumers National Bank, Beaverton, Oregon, Consent Order, Dept. of the Treasury, Office of the Comptroller of the Currency (15 Apr 2003) (available at http://www.occ.treas.gov/ftp/eas/ea2003%2D39.pdf).

[40] Garson, R., *OCC Closes NextBank and Appoints FDIC Receiver*, OCC press release (7 Feb. 2002).

[41] *Id*.

[42] Federal Deposit Insurance Corp., *Failed Bank Information – Bank Closing Information for NextBank, N.A. Phoenix, AZ*, http://www.fdic.gov/bank/individual/failed/nextbank.html.

Ironically, the NextCard deals entered early amortization anyway in July 2002. Weak performance of the underlying portfolios tripped the main performance-based trigger. The FDIC responded immediately by shutting-off the accounts. That is, cardholders could no longer use their cards to make purchases. After the FDIC closed the accounts, the "good" cardholders paid-off their accounts, leaving only the weaker credits in the pool. Delinquencies and charge-offs grew dramatically. The FDIC had difficulty unloading the NextCard portfolio because the servicing fee was too low.[43] Ratings on the senior tranches of the NextCard deals have fallen to triple-B territory from having started at triple-A. Ratings of the mezzanine and subordinate tranches have been downgraded into default or deep speculative-grade territory:

Ratings of NextCard Credit Card ABS				
Tranche	**A**	**B**	**C**	**D**
Moody's (1/17/03)	Baa3	B3	**Ca**	C
S&P (5/2/03)	BBB-	B-	CCC-	CC

The NextCard deals suffered a variety of challenges: (1) a servicing fee that was too low to attract a successor servicer, (2) early amortization delayed by the FDIC, and (3) a declining pool in early amortization because the accounts had been closed. Lessons from the NextCard experience include the following: (a) contractual early amortization triggers may not work, (b) the "declining pool" scenario can happen, (c) a deal's servicing fee must be large enough to attract a successor servicer, (d) the performance of securitized assets can be tightly linked to business fortunes of the issuer, and (e) no transaction is "bankruptcy proof."

8. Amresco Residential Securities Corp. 1998-1

Amresco Residential series 1998-1 (AMRES 1998-1) was backed by fixed-rate, sub-prime residential mortgage loans. Class BF1, rated Baa3/BBB/BBB- at issuance, was downgraded to default status by both S&P and Fitch (D from both agencies). Moody's downgraded the class to near default status (Caa3). In 2000, the deal began to suffer from increased delinquencies, the erosion of overcollateralization, and losses that exceeded monthly excess interest. This prompted S&P to take a series of downgrades to the BF1 class in 2000 and 2001. Class BF1 was finally brought to default status in 2002 by both S&P and Fitch due to substantial principal write-downs, total depletion of over collateralization, and inadequate excess interest to cover realized losses.[44]

9. Conseco Finance Vehicle Trust 2000-B

Conseco Finance Vehicle Trust 2000-B (CFVT 2000-B) was backed by installment contracts for trucks and trailers. Moody's and Fitch rated the deal. Classes M1, M2, and B were each downgraded to default status due to poor performance of the collateral.

The deal began to encounter trouble in 2001 amidst a weakening economy and subsequent slowdown in the trucking industry.[45] As freight shipments decreased and costs for fuel and insurance rose, the obligors of the transaction, truck owners and operators, suffered. As a result, pool performance was poor and, in July of 2002, Fitch downgraded class B from triple-C to triple-D. At this time, the pool was under collateralized by $22M. Moody's downgraded the class B note from Caa3 to C in August of 2002. The trucking industry remained depressed, leading to higher losses,

[43] After the FDIC closed NextCard, the FDIC's actual servicing cost of the card portfolio exceeded the servicing fees. *See*, Office of Inspector General, Federal Deposit Insurance Corporation, *The Division of Resolutions and Receiverships' Resolution and Management of Credit Card Portfolios (Audit Report No. 03-029)*, (17 Apr 2003) (http://www.fdic.gov/oig/a-rep03/03-029-508.html).

[44] Stavropoulos, P., *AMRESCO Residential Securities Corp. Mortgage Loan Trust 1998-1 Ratings Lowered and Affirmed*, S&P Press Release (15 March 2002).

[45] Chou, A., *Fitch Downgrades Conseco Finance Vehicle Trust 2000-B M1, M2 &B*, Fitch press release, (13 Dec 2001).

and in September of 2002, class M2 initially rated A3/A, was the next to reach default status.[46] In April of 2003, Conseco Finance, which was in bankruptcy and previously acted as servicer, rejected servicing the receivables and U.S. Bank Portfolio Services took over as servicer. Consequently, the transaction experienced a high rate of delinquencies and defaults and under-collateralization reached $42M by June of 2003. Fitch downgraded the A2 and A3 classes, both rated AAA at issuance, to CC and class M1, initially rated AA, to C.[47] Moody's downgraded classes M1, M2, and B to C in August 2002[48] and later downgraded the class A2 and A3 notes to Caa2 and Caa3, respectively.[49]

10. Delta Funding Home Equity Loan Trust 2000-4

Delta Funding 2000-4 (DELHE 2000-4) was backed by sub-prime residential mortgage loans. The senior tranches (classes A and IO) were covered by an insurance policy from FSA and carried triple-A ratings from all three rating agencies. The mezzanine and subordinate tranches (M1, M2, and B) were rated by Standard & Poor's and Fitch. The class B subordinate securities ultimately reached default status (D from S&P).

The transaction experienced higher-than-expected losses and a depletion of overcollateralization. By July 2003, class B had taken a $92,110 principal write-down, realized losses exceeded excess interest cash flow by an average of 5 times, and serious delinquencies averaged nearly 30%.[50] As a result, Standard & Poor’s and Fitch downgraded the class B note to D and CC, respectively. Fitch subsequently lowered the rating of the class B note to C.

11. GE Capital Mortgage Services (7 defaults)

Various home equity securitizations from GE Capital Mortgage Services (GECMS) included tranches that initially carried investment grade ratings but which subsequently fell to default status. Moody's and Fitch rated the senior tranches of each deal, but the mezzanine and subordinate tranches usually carried ratings from only one rating agency. Unlike most home equity ABS, GE structured its securitizations with subordination as the only credit enhancement. That is, excess spread was not available to cover losses. When losses on the underlying pools exceeded expectations, the subordinate tranches suffered.

GE Home Equity ABS Defaults

Deal	Class	Moody's		Fitch	
		Initial	Final	Initial	Final
1996-HE3	B2	Baa2	Ca		
1996-HE4	B1			A	D
1997-HE1	B1			A	D
1997 HE2	B2	Baa2	C	BBB	D
1997 HE3	B2	Baa2	Ca	BBB	C
1997 HE4	B2	Baa2	Ca	BBB	C
1998-HE1	B2	Baa2	Ca		

[46] Chou, A., *Fitch Ratings Downgrades Conseco Finance Vehicle Trust 2000-B*, Fitch press release (13 Sep 2002).

[47] Chou, A., *Fitch Ratings Downgrades Conseco Finance Vehicle Trust 2000-B*, Fitch Press Release (5 Jun 2003).

[48] Havlicek, B., *Moody's Downgrades The Ratings on Asset-Backed Notes Issued By Conseco Finance Vehicle Trust 2000-B*, Moody's press release (8 Aug 2002).

[49] O. Filipenko, *Moody's Downgrades the Rating on Class A-3 Asset-Backed Notes to Caa3 and Confirms the Caa2 Rating on Class A-2 of Asset-Backed Notes Issued by Conseco Finance Vehicle Trust 2000-B*, Moody's press release (9 May 2003).

[50] Rivera, J., *Delta Funding Home Equity Loan Trust 2000-4 Rating Lowered on Class B to ‘D’; Others Affirmed*, Standard & Poor's press release (28 Jul 2003).

12. ICON Equipment Lease Grantor Trust 1998-A

ICON 1998-A was backed by leases on various types of equipment: computers, fixtures, restaurant equipment, telecommunications equipment, and manufacturing equipment.[51] Fitch was the only rating agency on the deal and rated the senior tranche AA. The mezzanine class C securities initially carried a rating of BBB but later suffered downgrades to D. The senior tranche was downgraded to B.[52]

13. IMC Home Equity Loan Trust 1997-3, 1997-5 and 1998-1

IMC 1997-3, 1997-5 and 1998-1 (IMCHE 1997-3, 1997-5, and 1998-1) were deals backed by sub-prime mortgage loans. The class B notes from each deal initially carried triple-B ratings but later defaulted. Moody's and Fitch rated all three series, while S&P rated only 1997-5 and 1998-1. Higher-than-expected losses on the underlying mortgage loans caused the defaults. Each of the deals suffered a series of downgrades from 2000 through 2004.[53]

IMC Mortgage Company ceased operations in July 2001. The company's fortunes declined precipitously in the fall of 1998. The company's last securitization was in December 1998.

14. IndyMac Home Equity Loan Trust 2001-A

IndyMac Home Equity Loan Trust 2001-A (INHEL 2001-A) is backed primarily by fixed-rate sub-prime home equity loans and 9.5% of the underlying assets were composed of manufactured housing loans.[54] Class BF initially carried triple-B ratings from all three rating agencies but subsequently was downgraded to default status by all three. According to Bloomberg[SM], Class MF2 initially carried single-A ratings from all three rating agencies and subsequently was downgraded to D by S&P in July 2004.

Downgrades were initially taken in 2003 due to higher-than-expected defaults and low recovery rates on the sale of repossessed manufactured homes.[55] Losses to the deal continued to increase, resulting in the erosion of over collateralization. This was exacerbated by the existence of a 36-month interest-only strip, which siphoned off excess spread that would have been used to cover losses and build overcollateralization.[56]

15. Lehman Home Equity Loan Trust 1998-1

Lehman Home Equity Loan Trust 1998-1 (LHELT 1998-1) was backed by sub-prime mortgage loans. Moody's and Fitch assigned triple-A ratings to the deal's senior securities. Fitch alone rated the other classes of the deal. The class B-1 securities initially carried a BBB rating but later fell to D. The underlying loan pool had performed worse than expected.

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[51] Nugent, D., *ICON Equipment Lease Grantor Trust 1998-A*, Fitch new issue report (10 Dec 1998).

[52] Tuczak, J., *Fitch Dwngrs ICON Capital Equipment Lease Securitizations*, Fitch press release (27 Sep 2002).

[53] Skelton, D., *Moody's Downgrades Eight Subordinate Classes Issued By IMC Home Equity Trusts in 1997 and 1998*, Moody's press release (17 Mar 2004) (downgrading class B securities to Ca); Davey, S., *IMC Home Equity Loan Trust 1998-1 Rating on Class B Certificates Lowered to 'CCC'*, Standard & Poor's press release (9 Mar 2004); Bolden, A., *IMC Home Equity Loan Trust 1997-5 Note Rating Lowered, Others Affirmed*, Standard & Poor's press release (1 May 2001); Fontanez, M., *Fitch Takes Rating Actions On IMC Home Equity Loan Trust P-T Issue*, Fitch press release (24 Jul 2002); Davey, S., *IMC Home Equity Loan Trust 1998-1 Rating on Class B Certificates Lowered to 'D'*, Standard & Poor's press release (2 Aug 2004).

[54] Lieu, J., *Fitch Affirms 6 Classes & Downgrades 1 Class from 1 IndyMac ABS HE Issue*, Fitch press release, (18 Mar 2004).

[55] Grohotolski, J., *Moody's Downgrades IndyMac Series SPMD 2000-C and SPMD 2001-A Backed by Home Equity and Manufactured Housing Loans,* Moody's press release (25 Apr 2003).

[56] Ishidoya, K., *Fitch Affirms 13, Takes Actions on 4 Classes from 2 IndyMac ABS HE Issues*, Fitch press release, (7 Nov 2003).

16. Metropolitan Asset Funding Inc. II 2000-A

Metropolitan Asset Funding 2000-A (METRO 2000-A) is a deal backed by seller-financed mortgage loans. The underlying pool suffered losses that were greater-than-anticipated and the class B-1 certificates were subsequently downgraded to default status (D from Fitch) from original ratings of Baa2 and BBB from Moody's and Fitch, respectively.

Metropolitan Funding Corp. is a commercial real estate mortgage-banking firm that originates and buys real estate loans and contracts. Seller-financed loans are weaker in credit quality than lender-originated loans because many of the borrowers have trouble obtaining loans from established institutions.[57] That contributed to the poor performance of the deal. Losses to the pool exceeded the deal's excess spread and thus depleted the overcollateralization.

17. Salomon Brothers Mortgage Securities VII 1998-AQ1

SBM7 1998-AQ1 was backed by fixed-rate sub-prime residential mortgages originated by AmeriQuest and bought by Salomon. The B-3 class, initially rated BBB by Standard & Poor's, experienced a series of downgrades that began in 2001 and ended in default status (D) in February 2004.[58] Some of the deal's classes carried ratings from both S&P and Fitch (A-1 through A-7, XSN, XST, and B1). Other classes carried ratings only from S&P (XSS and B-2 through B-5).

The deal's underlying pool performed somewhat worse than expected. Rising losses caused erosion of the deal's credit support. According to Standard & Poor's, as of February 2004, net losses averaged $246,000 a month over the preceding year. Total delinquencies increased from 14.9% to 17% and serious delinquencies (90-plus, foreclosure and REO) increased to 13.26% from 11.99%.[59]

18. Soundview Home Equity Loan Trust 2001-1

Soundview series 2001-1 (SVHE 2001-1) is backed by subprime mortgage loans from Delta Funding Corp. The deal's senior classes are insured by FSA and carry ratings from Standard & Poor's, Moody's, and Fitch. The mezzanine and subordinated classes (M1, M2, and B) are uninsured and carry ratings from Standard & Poor's and Fitch. The class B securities, initially rated triple-B by Standard & Poor's and Fitch, fell to default status (D from S&P) in September 2003.[60] The deal experienced a high level of losses that exceeded excess spread and hit the subordinate classes.[61]

19. T&W Funding 1997-A, 1998-A, 1998-B, and 1999-A

T&W Financial Services issued four series of equipment lease-backed ABS that reached default status. Fitch was the only rating agency on the deals.

The four series were TWFC 1997-A ($74 million), TWFC 1998-A ($84 million), TWFC 1998-B ($76 million), and TWFC 1999-A ($110 million). The leases backing the deals covered transportation, computer-related, restaurant, medical, and pharmaceutical equipment.

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[57] Chan, A., *Moody's Downgrades Three Classes of Metropolitan Mortgage Funding, Series 2000-A Certificates*, Moody's press release (11 Aug 2003).

[58] Mahabir, L., *Salomon Brothers Mortgage Securities VII 1998-AQ1 Rating on B-3 Cut to 'D'; Others Affirmed*, Standard & Poor's press release (13 Feb 2004).

[59] *Id.*

[60] Stavropoulos, P., *Soundview-Related Ratings Lowered on 2 Classes; 13 Others Affirmed*, Standard & Poor's press release (12 Sep 2003); Smolyar, I., *Fitch Affirms 2, Lowers 1 & Places 1 Class On Watch for Soundview HELT 2001-1,* Fitch press release (5 Jun 2003).

[61] Stavropoulos, P., *Soundview-Related Ratings Lowered on 2 Classes; 13 Others Affirmed*, Standard & Poor's press release (12 Sep 2003).

Between 2000 and 2004, Fitch took a series of downgrades to both the senior and the subordinate classes in each of the four series. In 2000, there was a significant increase in delinquencies to the pools backing series 1998-A, 1998-B, and 1999-A. Fitch watchlisted the subordinate notes of those series in January 2000.[62] The following month Finova took over servicing the deals and Fitch watchlisted the senior notes and downgraded the subordinate notes. Fitch disclosed that it had learned of servicer defaults by T&W.[63] A short while later, T&W announced that it was winding down its business.[64] In May 2000, Fitch downgraded the senior notes from their initial ratings of AAA and further downgraded the subordinate notes. In taking that action, Fitch stated that "the underlying collateral for a number of these concentrations is inconsistent with the original representations made to us about the type of collateral included in these transactions."[65] In August 2000, Fitch downgraded the senior notes to B.[66] The ratings of the senior notes subsequently dropped to CCC in November 2000 and finally reached C in February 2003.[67]

Meanwhile, the subordinate notes, which started with investment-grade ratings (A or BBB depending on which series), reached C in November 2000. Fitch took no further rating action on the subordinate notes, but the senior notes fell to C in February 2003, indicating that the deals had suffered further deterioration.

20. The Money Store Home Equity Trust 1998-A

Money Store 1998-A (TMSHE 1998-A) included a sub-pool of home improvement loans that performed badly. The mezzanine and subordinate tranches (classes MH and BH) defaulted after having received initial ratings of single-A and triple-B, respectively. However, the defaults were cured reasonably quickly and both tranches paid-off in full. Standard & Poor's and Fitch rated the affected securities.

The deal was backed by three distinct sub-pools of loans, each of which backed a corresponding "group" of certificates. Group 1 (classes AF1 through AF9) was backed by fixed rate home equity loans. Group 2 (class AV) was backed by adjustable rate home equity loans. Both of those groups had bond insurance and, therefore, never suffered any credit problems. Moody's and Standard & Poor's rated Group 1 and Group 2. Group 3 (classes AH1 through AH5, MH1, MH2, and BH) was backed by home improvement loans and did not have bond insurance. Standard & Poor's and Fitch rated that group.

Beyond weak performance of the underlying collateral, a possible additional reason for the default of classes MH2 and BH was a drafting error in the deal's documents. S&P downgraded class BH to D in June 2003 and downgraded class MH2 to D a month later.[68] In each case, S&P noted that the affected class had suffered a principal write-down. However, Wachovia (formerly First Union), which had acquired The Money Store in 1998, subsequently restructured the deal to cure the defaults. In February 2004, S&P upgraded class MH2 to A+.[69] In the meantime, class BH had paid-off. Class MH2 paid-off in September 2004.

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[62] Cohn, W., *T&W Financial Securitizations on RatingAlert Negative*, Fitch press release (5 Jan 2000).

[63] Cohn, W., *T&W's 'AAA' Nts On RtgAlert-Neg & sub Notes Downgraded*, Fitch press release (8 Feb 2000).

[64] *T&W Financial Winds Down Business Operations*, Canadian Corporate News (24 Mar 2000).

[65] Barlow, D., *Fitch IBCA Downgrades Lehman/T&W Equip Lease Securitizations*, Fitch press release (8 May 2000).

[66] Barlow, D., *Fitch Downgrades Lehman/T&W Equip Lease Securitizations*, Fitch press release (31 Aug 2000).

[67] Keyes, B., *Fitch Downgrades T&W Equipment Lease Securitizations*, Fitch press release (3 Feb 2003).

[68] Stavropoulos, P., *Various Money Store Mortgage Loan Trust Ratings Raised, Lowered, and Affirmed*, Standard & Poor's press release (6 Jun 2003); Stavropoulos, P., *Money Store Trust 1998-A Class MH-2 Rating Lowered to 'D'*, Standard & Poor's press release (10 Jul 2003).

[69] Stavropoulos, P., *Various Money Store Mortgage Loan Trust Ratings Raised, Lowered, and Affirmed*, Standard & Poor's press release (12 Feb 2004).

21. UniCapital 1999-1 and 2000-1

UniCapital 1999-1 and 2000-1 (UCP 1991-1 and UCP 2000-1) were backed by leases and loans on equipment, including aircraft, telecommunication machinery, printing machinery, trucks, petroleum equipment, and vending machines. The senior tranches of each deal were wrapped by bond insurance and carried triple-A ratings from all three rating agencies. The subordinate tranches were rated only by Fitch. The class B securities of series 1999-1 carried an initial rating of BBB and subsequently suffered downgrades to D. The class B securities of series 2000-1 carried an initial rating of BBB- and also were downgraded to D.[70]

UniCapital Corporation was created by combining the operations of numerous small equipment-leasing companies. The company was formed in October 1997. In February 1998, the company announced its initial public stock offering. UniCapital appeared to operate successfully for a short while, but quickly ran into problems. In June 2000, shareholders filed a class action suit against the company.[71] In December 2000 the company filed for bankruptcy protection. A hearing on a proposed settlement of the securities litigation is scheduled for January 2005. UniCapital appears to be an example of a company's demise affecting the performance of its securitized assets.

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[70] Tuczak, J., *Fitch Downgrades UniCapital Equipment Lease Securitizations*, Fitch press release, (25 May 2002) .

[71] *In re UniCapital Corp. Secs. Litig.*, Case No. 00-2054 (S.D. Fla. 2000).

Appendix B – Enron

For purposes of this study, we have excluded transactions by Enron. Although some of Enron's ill-fated deals have been called "securitizations" or "structured financings," we feel that they were never really part of the ABS market. Indeed, the ABS market took pains to distance itself from the Enron transactions very shortly after the scandal broke.[72]

However, the Enron scandal vividly revealed that the tools of structured finance can be used for fraud and manipulation. According to the examiner in Enron's bankruptcy, the company's use of structured deals differed from regular securitizations because Enron's deals (1) transferred neither the risk of nor the control over the underlying assets, (2) did not reduce borrowing costs, (3) were not disclosed, (4) were motivated to obtain funding that was not reported as debt, and (5) were motivated to manipulate reported financials.[73] In contrast, legitimate structured financings have real economic purpose and are used for legitimate corporate purposes.

In Enron's bankruptcy, the true sale character of the transactions was challenged. Key elements of the analysis included retention of risks and rewards, retention of control, and Enron's intent to use the transactions for "balance sheet management" rather than as final and irrevocable dispositions of the subject assets. Enron's deals also were defective from the standpoint of substantive consolidation: (1) reliance on Enron credit rather than on performance of the assets, (2) Enron's retention of control over the assets, and (3) loans between Enron and the deals negated the position that the deals were operated separately. Enron did observe the formalities of separate phone numbers and letterhead for its SPEs, but those formalities, by themselves, may not be enough to prevent substantive consolidation. Permitted investments for the deals included Enron debt securities. Enron used payments on its debt securities as a way to provide liquidity to the SPEs. However, given that Enron was insolvent at certain times, those payments could be attacked as fraudulent conveyances or preferential transfers.

Enron started as a gas pipeline company, but it quickly expanded into other areas. In 2000, the company reported revenues of more than $100 billion and had more than 20,000 employees. To finance its enormous operations Enron turned to innovative financing structures and aggressive accounting techniques. The company was reluctant to issue more stock or more corporate bonds. Through off-balance-sheet transactions, Enron borrowed billions of dollars. At the time of its bankruptcy, $14 billion of Enron's $38 billion of debt was attributable to off-balance sheet transactions. In addition, mark-to-market accounting was a source of problems for Enron. Enron recognized earnings on some contracts long before realizing any cash. The mark-to-market accounting practices could have triggered earnings volatility. Enron used other off-balance sheet transactions to dampen potential volatility associated with mark-to-market accounting and to produce cash flows that would match reported earnings.

Enron also used off-balance sheet transactions to mask the impact of bad business decisions, including bad investments in its merchant portfolio. The problem was so severe that Enron created a "Special Assets Group" to deal with the troubled assets. Enron parked the troubled assets in off-balance sheet entities.

The last two weeks of 1999 illustrate the extent to which Enron relied on SPEs to achieve financial statement results. In that period, the company executed eleven deals. In none of them was the repayment obligation reflected as debt on Enron's financial statements.

[72] Gregory, M. and Donovan, K., *BMA Hosts ABS Press Gathering*, Asset Securitization Report (25 Mar 2002).

[73] Remarks of Neal Batson, Court-Appointed Examiner in the Enron Bankruptcy, at ABS West 2004, Information Management Network (26 Jan 2004); ***see*** Report from Arizona 2004: Coverage of Selected Sessions of the Winter Securitization Conferences, Nomura Fixed Income Research at 12 (10 Feb 2004). Mr. Batson may have been unaware that certain mainstream securitizations (1) transfer only a trifling degree of risk, (2) do not transfer control in a practical sense, (3) do not reduce the sponsors' borrowing costs, and (4) are motivated primarily to obtain funding that is not reported as debt.

Enron used six accounting techniques to improve the appearance of its financial statements:[74]

- FAS 125/140 Transactions: Enron would transfer assets to an SPE partnership, which would issue 97% debt and 3% equity. The debt would be guaranteed with a total return swap from Enron. Also, Enron would often guarantee repayment of the equity. The assets rarely produced cash flow to repay the debt. The guarantees undermined the true sale character of the transfers. Enron characterized the cash from the asset transfer as income from operations rather than as proceeds from borrowings. Often, the very assets transferred to a partnership would be re-transferred to Enron and would later become the subject of another similar arrangement.

- Commodity Prepay Transactions: Enron would use offsetting forward delivery contracts to create the economic equivalent of a loan. Enron booked the cash flow as cash flow from operations rather than as cash flow from borrowings.

- Share Trusts: A complex off-balance sheet structure would issue debt and use the proceeds to purchase assets from Enron. Enron would guarantee the debt with a pledge of its stock and with a straight guarantee.

- Minority Interest Transactions: Minority interest transactions allowed Enron to report exposures in-between liabilities and shareholders' equity on its balance sheet.

- Tax Transactions: Enron used some transactions to generate accounting income even if doing so created substantial tax liability.

- Non-Economic Hedges and Other Related-Party Transactions: Enron wrote hedges on assets and backed the hedges with its own stock. The deals were not true hedges because Enron was essentially hedging with itself.

Enron engaged in extensive self-dealing in connection with each of the accounting techniques that it used. A key warning sign arguably should have been the absence of outside third parties dealing with Enron on an arms-length basis. Enron's demise came from bad investments combined with improper accounting methods (which used SPEs). However, the improprieties could not have occurred absent the highly charged competitive environment at the company and the failure of oversight by the company's board of directors and by its outside lawyers or accountants.

On Sunday, 2 December 2001, Enron filed for bankruptcy. Enron had been ranked as the seventh largest company in the world. When Enron filed for bankruptcy, its stock was virtually worthless and its debt was traded as junk. A short while earlier, it had a high stock price and its debt had been rated investment grade.

The bankruptcy courts appointed Neal Batson as the examiner to report on the use of off-balance sheet SPEs and partnerships by Enron. Ultimately, the Enron investigations culminated in four reports, totaling thousands of pages and over 14,000 footnotes.[75] The first and second reports analyzed transactions and the third and fourth addressed potential claims by Enron's estate against third parties. The examiner considered whether there was enough evidence supporting such claims that they should be submitted to a judge or jury. The examiner's investigation uncovered roughly $10 billion in claims.

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[74] *See In re Enron Corp.*, No. 01-16034, Final Report of Neal Batson, Court Appointed Examiner at 18-20 (Bankr. S.D.N.Y. 4 Nov 2003) (available at http://www.enron.com/corp/por/pdfs/examinerfinal/NBFinalExecutiveSummary.pdf).

[75] The four reports are available at http://www.enron.com/corp/por/supporting.html. The reports are included among the supporting documentation for the disclosure statement regarding Enron's reorganization plan.

Following Enron's bankruptcy, both the FASB and the SEC targeted off-balance sheet accounting. This was arguably unjustified. Enron manipulated its financial statements – it committed common securities fraud. One example of Enron's wrongdoing involved the Rhythms IPO. After the price of the stock ran up tremendously, Enron used the LJM1 partnership to hedge a possible decline in price of the Rhythms stock. Enron backed up the hedge with its own stock. But, this meant that there was no real economic substance in the deal. LJM1 had no real role in the deal other than to hide its real economic substance.[76] Unfortunately, all off-balance sheet SPEs – including the ones used in securitizations – became suspect.

Enron triggered an unfortunate backlash in Congress. The Enron scandal killed proposed section 912 of the bankruptcy reform bill,[77] which would have provided a safe harbor for securitization true sales. Also, Enron triggered the introduction of the Durbin-Delahunt bill,[78] which would have attacked true sales.

Arguably, the real differences between Enron and legitimate securitizations is that the Enron structures were much more complex and were tainted by conflicts of interest. Securitization generally is fair to unsecured creditors. Securitization supplies a company with cash (as would other financing methods) and with lower-cost funding. In fact, unsecured creditors often are better off because of securitization.

[76] *In re Enron Corp.*, No. 01-16034, Second Interim Report of Neal Batson, Court Appointed Examiner, Appendix L, Annex 2 (Bankr. S.D.N.Y. 5 Mar 2003) (available at http://www.enron.com/corp/por/examiner2.html).

[77] H.R. 333, 107th Cong., 1st Sess. § 912 (2001); H.R. 3211, 107th Cong., 1st Sess. § 13 (2001).

[78] Employee Abuse Prevention Act of 2002, H.R. 5221, 107th Cong., 2d Sess. (2002), S. 2798, 107th Cong., 2d Sess. (2002).

Appendix C – Problems & Lessons Crib Sheet

Problems/Challenges Presented in Various Troubled ABS Deals	LTV Steel	DVI	Heilig-Meyers	NextCard	Spiegel / First Consumers	NCFE
Servicing fee too low to attract successor servicer				✓	✓	
Intervention by regulator to raise servicing fee					✓	
Creditors challenge "true sale" of assets	✓					
Asset performance linked to idiosyncratic servicing and collection practices		✓	✓			
Declining pool in early amortization (account closures)			✓	✓	✓	
Early amortization delayed by regulator				✓		
Early amortization delayed by issuer		✓			✓	
"Fraud losses" reclassified as "credit losses" by regulators				✓	✓	
Manipulation of triggers					✓	
Servicer misappropriates collections		✓			✓	✓
Fraud regarding the existence or character of the assets						✓
Securities fraud in sale of ABS					✓	✓
Triple-A-rated ABS downgraded		✓	✓	✓	✓	✓
Triple-A-rated ABS default (incl. forced exchange)	✓		✓			

Lessons from Various Troubled ABS Deals	LTV Steel	DVI	Heilig-Meyers	NextCard	Spiegel / First Consumers	NCFE
Idiosyncratic servicing and collection practices can strongly affect the performance of securitized receivables		✓	✓			
Contractual early amortization triggers may not work		✓		✓	✓	
The "declining pool" scenario can really happen			✓	✓	✓	
Without audits or third-party oversight, an ABS servicer in financial distress may manipulate amortization triggers, divert deal cash flows, or otherwise misappropriate assets		✓			✓	✓
The performance of securitized assets can be impaired by actions taken by a servicer in financial distress	✓	✓	✓	✓	✓	
A deal's servicing fee must be large enough to attract a successor servicer			✓	✓	✓	
Regulator can increase the servicing fee in an ABS deal					✓	
Fraud risk is real and investors should demand protective features in the deals that they buy					✓	✓
No transaction is "bankruptcy proof"	✓	✓	✓	✓	✓	✓

Appendix D – List of Deals with Adverse Credit Events

This appendix lists the deals associated with adverse credit events and identifies the rating agencies that assigned ratings to securities issued in the deals.

Credit events: **1**=default, **2**=near default, **3**=major downgrade, **4**=minor downgrade

Asset types: **AP**=prime auto loans, **AS**=subprime auto loans, **CB**=bank credit cards, **CP**=private label (store) credit cards, **EQ**=equipment leases, **HE**=home equity, **MH**=manufactured housing, **OT**=other, **SL**=student loans.

Issuer	Series	Date	Amount ($ mil.)	Asset Type	Moodys	S&P	Fitch	Duff	Credit Event
ABSC Mfd. Hsg. Contract	2004-OK1	01/20/04	252.1	MH		✓			4
Access Financial Mfd. Hsg. Contract Trust	1996-1	05/24/96	159.6	MH	✓	✓	✓		4
ACLC Business Loan Receivables Trust	1998-2	12/30/98	154.7	OT	✓	✓	✓		2
ACLC Business Loan Receivables Trust	1999-1	06/10/99	220.9	OT	✓	✓	✓	✓	1
ACLC Business Loan Receivables Trust	1999-2	12/02/99	340.0	OT	✓	✓	✓	✓	3
ACLC Business Loan Receivables Trust	2000-1	08/07/00	209.5	OT	✓	✓	✓		1
ACLC Business Loan Receivables Trust	2002-1	04/17/02	114.4	OT	✓	✓			2
ACLC Franchise Loan Receivables Trust	1998-1	06/16/98	134.2	OT		✓	✓	✓	3
ACLC Franchise Loan Receivables Trust	1998-A	09/29/98	114.0	OT	✓	✓	✓		3
Aegis Auto Owners Trust	1995-A	12/29/95	175.0	AS	✓	✓			1
AerCo Ltd.	1998-1A	07/15/98	992.0	AC	✓	✓	✓		2
AerCo Ltd.	2000-2A	07/17/00	1089.1	AC	✓	✓	✓		2
Aerofreighter Finance Trust	A	12/21/99	130.0	AC	✓	✓	✓		2
Air 2 US	D	10/28/99	1.1	AC	✓		✓		1
Aircraft Finance Trust	1999-1	04/22/99	1209.0	AC	✓	✓			2
Aircraft Indebtedness Repackaging	1997-1	09/30/97	56.2	AC			✓		2
Aircraft Indebtedness Repackaging	1998-1	06/30/98	32.3	AC			✓		3
Aircraft Indebtedness Repackaging	1998-2	10/30/98	32.1	AC			✓		3
Aircraft Lease Portfolio Securitization	1996-1	06/18/96	393.5	AC	✓	✓			1
Airplanes Pass Through Trust	1	03/13/96	4048.0	AC	✓	✓		✓	1
Airplanes Pass Through Trust	1R	03/09/98	2437.0	AC	✓	✓		✓	1
Airplanes Pass-Through Trust	2001-1	03/08/01	750.0	AC	✓	✓	✓		3
AJ Acceptance Vehicle Trust	1996-A	11/26/96	60.7	AS	✓				2
American Airlines Inc. Pass Through Trusts	1999-1	09/23/99	600.0	AC	✓	✓			3
American Residential Home Equity Loan Tr.	1998-1	06/25/98	98.9	HE		✓	✓		2
Amresco Commercial Lending Corp.	1998-1	06/03/98	125.0	OT		✓	✓	✓	1
Amresco Residential Securities Corp.	1998-1	01/28/98	1000.0	HE	✓	✓	✓		1
Amresco Residential Securities Corp.	1997-3	09/05/97	950.0	HE	✓	✓	✓	✓	3
Asset Backed Securities Corp.	7	04/17/90	609.3	AP	✓	✓			3
Associates Mfd. Hsg. Contract	1996-1	09/20/96	888.0	MH	✓	✓	✓		4
Associates Mfd. Hsg. Contract	1997-1	03/17/97	392.8	MH	✓	✓	✓		4
Associates Mfd. Hsg. Contract	1997-2	09/17/97	389.6	MH	✓	✓	✓		4
Atherton Franchisee Loan Funding LLC	1997-A	03/18/97	97.0	OT				✓	3
Atherton Franchisee Loan Funding LLC	1999-A	06/01/99	146.9	OT		✓	✓		1
Atlas Air Inc. Pass-Through Trusts	1998-1	07/02/98	538.9	AC			✓		2
Atlas Air Pass Through Trusts	1999-1	04/05/99	543.6	AC	✓	✓	✓	✓	3
Auto One Finance Corp.	1991-A			AP		✓			4
Auto One Finance Corp.	1991-B			AP		✓			4
Auto One Finance Corp.	1991-C			AP		✓			4
Auto One Finance Corp.	1992-A			AP		✓			4
Auto One Finance Corp.	1992-B			AP		✓			4
Auto One Finance Corp.	1992-C			AP		✓			4
Auto One Finance Corp.	1993-A	08/24/93	30.0	AP		✓			4

Issuer	Series	Date	Amount ($ mil.)	Asset Type	Moodys	S&P	Fitch	Duff	Credit Event
AutoBond Rec. Trust	1995-A	12/29/95	26.0	AS	✓		✓		1
AutoBond Rec. Trust	1996-A	03/29/96	16.6	AS	✓		✓		1
AutoBond Rec. Trust	1996-B	06/27/96	20.0	AS	✓		✓		1
AutoBond Rec. Trust	1996-C	09/30/96	22.3	AS	✓		✓		1
AutoBond Rec. Trust	1996-D	12/30/96	25.0	AS	✓		✓		1
AutoBond Rec. Trust	1997-A	03/31/97	28.8	AS	✓		✓		1
AutoBond Rec. Trust	1997-B	08/25/97	34.7	AS	✓		✓		1
AutoBond Rec. Trust	1997-C	10/23/97	34.4	AS	✓		✓		1
Autoflow Grantor Trust	1996-1	09/16/96	161.2	AS	✓				4
Aviation Capital Group Trust	2000-1	11/20/00	687.0	AC	✓	✓	✓		3
BA Credit Card Corp. Ltd.	1996-1	07/25/96	830.0	CB	✓	✓	✓		3
BankAmerica Mfd. Hsg. Contract Trust	1995-BA1			CB			✓		4
BankAmerica Mfd. Hsg. Contract Trust	1996-1	06/07/96	245.8	MH	✓		✓		1
BankAmerica Mfd. Hsg. Contract Trust	1997-1	07/31/97	254.1	MH	✓		✓		1
BankAmerica Mfd. Hsg. Contract Trust	1997-2	11/14/97	500.0	MH	✓		✓		1
BankAmerica Mfd. Hsg. Contract Trust	1998-1	03/24/98	855.1	MH	✓		✓		3
BankAmerica Mfd. Hsg. Contract Trust	1998-2	06/23/98	686.0	MH	✓		✓		3
Bombardier Capital Mtg. Securitization Corp.	1998-A	01/16/98	185.6	MH	✓		✓		2
Bombardier Capital Mtg. Securitization Corp.	1998-B	07/17/98	294.6	MH	✓		✓		1
Bombardier Capital Mtg. Securitization Corp.	1998-C	11/23/98	184.8	MH		✓	✓		2
Bombardier Capital Mtg. Securitization Corp.	1999-A	01/28/99	175.5	MH	✓	✓			2
Bombardier Capital Mtg. Securitization Corp.	1999-B	08/31/99	452.7	MH	✓		✓		1
Bombardier Capital Mtg. Securitization Corp.	2000-A	01/24/00	401.2	MH	✓		✓		1
Bombardier Capital Mtg. Securitization Corp.	2001-A	01/25/01	324.2	MH	✓		✓		2
BW Home Equity Trust	1990-1	09/12/90	77.2	HE	✓				3
BW Trust	1990-1	03/14/90	77.7	AP	✓				3
Captec Financial Group Loan Receivables Trust	1996-A	05/13/96	97.0	OT				✓	2
Captec Franchise Trust	1999-1	05/24/99	135.6	OT	✓	✓			1
Captec Franchise Trust	2000-1	02/28/00	181.5	OT	✓			✓	2
Centerpoint Funding Company II, LLC	2001-1	01/02/02	23.6	EQ	✓				2
CFC-8 Grantor Trust		03/14/90	602.2	AP	✓	✓			3
Chemical Bank Grantor Trust	1990-A	02/14/90	502.7	AP	✓	✓			3
CIT EC-EF Owner Trust	2001-A	09/06/01	1111.6	EQ	✓	✓	✓		4
CIT Home Equity Loan Trust	1998-1	07/31/98	341.4	HE	✓	✓			4
CIT RV Owner Trust	1996-B	08/14/96	240.0	AP	✓	✓			3
CIT RV Trust	1997-A	11/20/97	564.1	AP	✓	✓			3
CIT RV Trust	1998-A	06/03/98	400.1	AP	✓	✓			3
CIT RV Trust	1999-A	05/12/99	575.7	AP	✓	✓			3
Cityscape Home Equity Loan Trust	1997-B	04/07/97	197.5	HE		✓	✓	✓	1
Cityscape Home Equity Loan Trust	1997-C	06/20/97	200.0	HE		✓	✓	✓	3
Cityscape Home Loan Owner Trust	1997-1	02/13/97	116.1	HE		✓	✓	✓	1
Cityscape Home Loan Owner Trust	1997-2	04/07/97	99.0	HE		✓	✓	✓	2
Cityscape Home Loan Owner Trust	1997-4	09/09/97	198.0	HE		✓		✓	4
Conseco Finance Home Loan Trust	1999-F	09/24/99	738.8	HE		✓	✓		1
Conseco Finance Home Loan Trust	1999-G	11/01/99	270.9	HE	✓	✓			1
Conseco Finance Home Loan Trust	1999-H	11/17/99	856.0	HE		✓	✓	✓	1
Conseco Finance Home Loan Trust	2000-A	02/04/00	295.5	HE	✓	✓		✓	3
Conseco Finance Home Loan Trust	2000-B	03/01/00	950.0	HE	✓	✓		✓	1
Conseco Finance Home Loan Trust	2000-D	06/21/00	941.0	HE	✓	✓			4
Conseco Finance Home Loan Trust	2000-E	09/22/00	300.0	HE	✓	✓	✓		4
Conseco Finance Home Loan Trust	2000-F	10/20/00	882.7	HE	✓	✓	✓		4
Conseco Finance Recrtn'l Enthusiast Consumer	2001-A	10/26/01	428.1	AP	✓	✓			3
Conseco Finance Securitizations Corp.	1999-6	11/16/99	985.0	MH	✓	✓			1
Conseco Finance Securitizations Corp.	2000-1	01/19/00	886.5	MH	✓		✓		1
Conseco Finance Securitizations Corp.	2000-2	05/19/00	705.0	MH	✓	✓	✓		1
Conseco Finance Securitizations Corp.	2000-3	06/23/00	940.0	MH	✓	✓			1
Conseco Finance Securitizations Corp.	2000-4	08/08/00	1243.8	MH	✓	✓	✓		1

Issuer	Series	Date	Amount ($ mil.)	Asset Type	Moodys	S&P	Fitch	Duff	Credit Event
Conseco Finance Securitizations Corp.	2000-5	09/28/00	716.3	MH	✓	✓	✓		1
Conseco Finance Securitizations Corp.	2000-6	12/15/00	445.5	MH	✓	✓	✓		1
Conseco Finance Securitizations Corp.	2001-1	03/16/01	600.0	MH	✓	✓	✓		1
Conseco Finance Securitizations Corp.	2001-2	06/13/01	500.0	MH	✓	✓	✓		1
Conseco Finance Securitizations Corp.	2001-3	08/27/01	600.0	MH	✓	✓			1
Conseco Finance Securitizations Corp.	2001-4	12/13/01	454.8	MH	✓	✓	✓		2
Conseco Finance Securitizations Corp.	2002-1	04/05/02	600.0	MH	✓	✓			2
Conseco Finance Securitizations Corp.	2002-2	06/10/02	442.5	MH	✓	✓			2
Conseco Finance Vehicle Trust	2000-B	11/22/00	530.5	AP	✓		✓		1
Constellation Financial Management LLC	1999-1	05/11/99	199.3	OT	✓				2
Constellation/FEP Receivables Funding	1999-2	09/30/99	174.0	OT	✓				3
Constellation/FEP Receivables Funding	2000-1	02/07/00	225.0	OT	✓				2
Constellation/FEP Receivables Funding	2000-2	04/07/00	176.0	OT	✓				2
Constellation/FEP Receivables Funding	2000-3	08/14/00	82.0	OT	✓				2
ContiMortgage Home Equity Loan Trust	1997-1	01/30/97	400.0	HE	✓		✓		1
ContiMortgage Home Equity Loan Trust	1997-2	03/12/97	835.0	HE	✓		✓		1
ContiMortgage Home Equity Loan Trust	1997-3	06/05/97	1265.0	HE	✓	✓	✓		1
ContiMortgage Home Equity Loan Trust	1997-4	09/18/97	1525.0	HE	✓	✓	✓		1
ContiMortgage Home Equity Loan Trust	1997-5	12/16/97	1660.0	HE	✓	✓	✓		1
ContiMortgage Home Equity Loan Trust	1998-1	03/05/98	1700.0	HE	✓	✓	✓		1
ContiMortgage Home Equity Loan Trust	1998-2	06/09/98	1750.0	HE	✓	✓	✓		3
ContiMortgage Home Equity Loan Trust	1998-3	09/18/98	2100.0	HE	✓	✓	✓		1
ContiMortgage Home Equity Loan Trust	1998-4	12/02/98	1049.3	HE	✓	✓	✓		1
ContiMortgage Home Equity Loan Trust	1999-1	02/24/99	650.0	HE	✓	✓	✓		1
ContiMortgage Home Equity Loan Trust	1999-2	03/19/99	550.0	HE	✓	✓			1
ContiMortgage Home Equity Loan Trust	1999-3	06/09/99	800.0	HE	✓	✓	✓		1
Continental Airlines	1997-3	09/12/97	88.6	AC	✓	✓			3
Continental Airlines Floating Enhanced Pass-Through Tr.	2000	11/21/00	176.4	AC	✓		✓		3
Continental Airlines Pass Through Trust	2000-2	11/14/00	841.0	AC	✓	✓			3
COSCO Container Freight Mgmt Master Tr.	1997-1	08/29/97	300.0	OT	✓			✓	3
CS First Boston Mortgage Securities	1995-1	12/15/95	1278.3	HE	✓	✓			3
Delta Funding Home Equity Loan Trust	1997-2	06/12/97	260.0	HE		✓	✓		3
Delta Funding Home Equity Loan Trust	1997-3	09/15/97	340.0	HE	✓		✓		2
Delta Funding Home Equity Loan Trust	1998-1	03/26/98	400.0	HE		✓	✓		3
Delta Funding Home Equity Loan Trust	1998-2	06/24/98	445.0	HE	✓	✓	✓		2
Delta Funding Home Equity Loan Trust	2000-2	06/28/00	275.0	HE		✓	✓		3
Delta Funding Home Equity Loan Trust	2000-4	12/13/00	115.0	HE		✓	✓		1
Deutsche Financial Capital Securitization LLC	1997-1	06/20/97	154.9	MH	✓		✓		1
Deutsche Financial Capital Securitization LLC	1998-1	01/22/98	220.2	MH	✓		✓		1
DVI Receivables VIII LLC	1999-1	07/21/99	237.3	EQ	✓		✓	✓	2
DVI Receivables X LLC	1999-2	10/25/99	262.1	EQ	✓		✓	✓	1
DVI Receivables XI LLC	2000-1	05/08/00	276.4	EQ	✓		✓		1
DVI Receivables XII LLC	2000-2	11/13/00	258.6	EQ	✓		✓		1
DVI Receivables XIV LLC	2001-1	05/08/01	315.3	EQ	✓		✓		1
DVI Receivables XIX LLC	2003-1	05/16/03	451.2	EQ	✓	✓	✓		1
DVI Receivables XVI LLC	2001-2	11/05/01	406.0	EQ	✓		✓		1
DVI Receivables XVII LLC	2002-1	05/03/02	441.1	EQ	✓		✓		1
DVI Receivables XVIII LLC	2002-2	11/08/02	487.0	EQ	✓		✓		1
Educational Enhancement Funding Corp.	2002-A	08/07/02	148.5	OT	✓	✓			4
EMAC Owner Trust	1999-1	03/19/99	281.6	OT	✓		✓	✓	1
EMAC Owner Trust	2000-1	02/10/00	428.0	OT	✓			✓	1
EMAC Secured Lending Corp.	1998-1	07/07/98	405.6	OT			✓	✓	1
Embarcadero Aircraft Securitization Trust	2000-A	08/25/00	792.6	AC	✓	✓	✓		1
Empire Funding Home Loan Owner Trust	1997-1	04/04/97	70.4	HE		✓		✓	2
Empire Funding Home Loan Owner Trust	1997-2	05/23/97	139.2	HE		✓		✓	4
Empire Funding Home Loan Owner Trust	1997-4	10/17/97	300.0	HE		✓		✓	3

Issuer	Series	Date	Amount ($ mil.)	Asset Type	Moodys	S&P	Fitch	Duff	Credit Event
Empire Funding Home Loan Owner Trust	1998-1	02/19/98	230.8	HE	✓		✓	✓	4
Empire Funding Home Loan Remic Trust	1997-A	04/04/97	50.0	HE		✓		✓	3
Epic Receivables LLC	1999	12/16/99	95.0	OT			✓		2
FABNY Grantor Trust	1990-A	10/25/90	75.0	AP	✓				3
Falcon Franchise Loan LLC	2003-1	01/29/03	141.1	OT	✓		✓		3
FFCA Secured Lending Corp.	1998-1	05/14/98	305.2	OT	✓		✓	✓	4
FFCA Secured Lending Corp.	1999-2	09/30/99	607.0	OT	✓		✓	✓	1
FFCA Secured Lending Corp.	2000-1	11/01/00	406.2	OT	✓		✓		1
FIB Business Loan Notes	1999-A	09/29/99	65.0	OT	✓			✓	3
FIB Business Loan Notes	2000-A	06/28/00	65.3	OT	✓		✓		2
FIB Trust Fund	1999-1	06/24/99	37.4	OT	✓				2
FIB Trust Fund	2000-1	03/30/00	35.1	OT	✓				2
First Consumers Credit Card Master Trust	2001-A	02/26/01	561.0	CB	✓	✓	✓		1
First Consumers Master Trust	1999-A	01/22/99	276.2	CB	✓	✓			1
First Deposit Credit Card Trust	1991-A	04/10/91	195.0	CB	✓	✓		✓	3
First International Bank SBA Loan Trust	2000-2	11/24/00	29.3	OT	✓		✓		3
First Nat'l Bank of New England SBA Loan Trust	1998-1	06/30/98	26.9	OT	✓				3
First Security Home Equity Trust	1990-A	09/27/90	115.0	HE	✓				3
First Union Home Equity Loan Trust	1997-1	05/21/97	234.3	HE			✓		3
First Union Home Equity Loan Trust	1997-2	08/21/97	259.8	HE			✓		2
FirstFed Corp. Mfd. Hsg. Contract	1996-1	10/30/96	45.6	MH	✓				3
FirstFed Corp. Mfd. Hsg. Contract	1997-1	01/16/97	47.1	MH			✓		3
FirstFed Corp. Mfd. Hsg. Contract	1997-2	04/24/97	49.2	MH	✓		✓		3
FMAC Equipment Receivables	1998-1	09/11/98	63.6	EQ			✓		4
FMAC Loan Receivables Trust	1996-B	12/20/96	227.7	OT		✓	✓		1
FMAC Loan Receivables Trust	1997-A	06/11/97	158.6	OT		✓	✓	✓	3
FMAC Loan Receivables Trust	1997-B	09/30/97	185.3	OT			✓	✓	1
FMAC Loan Receivables Trust	1997-C	12/19/97	152.4	OT		✓	✓	✓	1
FMAC Loan Receivables Trust	1998-A	03/18/98	201.8	OT		✓	✓	✓	1
FMAC Loan Receivables Trust	1998-B	06/24/98	297.6	OT		✓	✓	✓	1
FMAC Loan Receivables Trust	1998-C	09/21/98	374.0	OT	✓	✓	✓	✓	1
FNBNE Business Loan Notes	1998-A	12/30/98	65.0	OT	✓				3
Franchise Loan Receivables Trust	1996-A	06/28/96	161.0	OT			✓		2
Franchise Loan Trust	1998-1	09/08/98	366.9	OT	✓	✓	✓	✓	1
GE Capital Mortgage Services Inc.	1996-HE3	09/24/96	114.6	HE	✓		✓		1
GE Capital Mortgage Services Inc.	1996-HE4	12/20/96	215.9	HE	✓		✓		1
GE Capital Mortgage Services Inc.	1997-HE1	03/24/97	197.8	HE	✓		✓		1
GE Capital Mortgage Services Inc.	1997-HE2	06/20/97	239.2	HE	✓		✓		1
GE Capital Mortgage Services Inc.	1997-HE3	09/23/97	230.7	HE	✓		✓		1
GE Capital Mortgage Services Inc.	1997-HE4	12/22/97	181.5	HE	✓		✓		1
GE Capital Mortgage Services Inc.	1998-HE1	03/24/98	154.9	HE	✓		✓		1
GE Capital Mortgage Services Inc.	1998-HE2	06/23/98	194.4	HE	✓		✓		3
GE Capital Mortgage Services Inc.	1999-HE1	03/23/99	509.0	HE	✓		✓		2
GF Funding Corp. VIII Equip. Contract Tr	1999	09/30/99	97.9	EQ			✓	✓	4
Global Franchise Trust	1998-1	08/10/98	245.4	OT	✓		✓	✓	1
Green Tree Financial Corp.	1992-2	12/11/92	288.3	MH	✓			✓	2
Green Tree Financial Corp.	1993-1	03/11/93	250.4	MH	✓	✓			2
Green Tree Financial Corp.	1993-2	06/15/93	450.6	MH	✓			✓	3
Green Tree Financial Corp.	1993-3	09/01/93	663.4	MH	✓				2
Green Tree Financial Corp.	1993-4	12/22/93	725.2	MH	✓		✓		1
Green Tree Financial Corp.	1994-1	03/22/94	561.6	MH	✓	✓	✓		1
Green Tree Financial Corp.	1994-2	05/03/94	387.8	MH	✓	✓	✓		1
Green Tree Financial Corp.	1994-3	05/16/94	197.0	MH	✓	✓	✓		1
Green Tree Financial Corp.	1994-4	06/22/94	308.0	MH	✓	✓	✓		1
Green Tree Financial Corp.	1994-5	08/04/94	384.9	MH	✓		✓		1
Green Tree Financial Corp.	1994-6	09/22/94	463.9	MH	✓		✓		1
Green Tree Financial Corp.	1994-7	10/27/94	353.5	MH	✓		✓		1

Issuer	Series	Date	Amount ($ mil.)	Asset Type	Moodys	S&P	Fitch	Duff	Credit Event
Green Tree Financial Corp.	1994-8	12/15/94	523.2	MH	✓		✓		1
Green Tree Financial Corp.	1995-1	02/09/95	378.3	MH	✓		✓		1
Green Tree Financial Corp.	1995-10	12/14/95	405.1	MH	✓	✓	✓		1
Green Tree Financial Corp.	1995-2	03/23/95	328.3	MH	✓		✓		1
Green Tree Financial Corp.	1995-3	05/10/95	502.2	MH	✓	✓	✓		1
Green Tree Financial Corp.	1995-4	06/15/95	319.8	MH	✓	✓	✓		1
Green Tree Financial Corp.	1995-5	07/12/95	451.2	MH	✓	✓	✓		1
Green Tree Financial Corp.	1995-6	08/10/95	396.7	MH	✓	✓	✓		1
Green Tree Financial Corp.	1995-7	09/19/95	347.8	MH	✓	✓	✓		1
Green Tree Financial Corp.	1995-8	10/11/95	479.9	MH	✓	✓	✓		1
Green Tree Financial Corp.	1995-9	11/09/95	397.8	MH	✓	✓	✓		1
Green Tree Financial Corp.	1996-1	01/25/96	398.8	MH	✓	✓	✓		1
Green Tree Financial Corp.	1996-10	12/09/96	800.0	MH		✓	✓		1
Green Tree Financial Corp.	1996-2	03/14/96	465.3	MH	✓	✓	✓		1
Green Tree Financial Corp.	1996-3	04/15/96	371.9	MH	✓	✓	✓		1
Green Tree Financial Corp.	1996-4	05/23/96	474.7	MH	✓	✓	✓		1
Green Tree Financial Corp.	1996-5	06/20/96	517.6	MH	✓	✓	✓		1
Green Tree Financial Corp.	1996-6	07/24/96	475.0	MH	✓	✓	✓		1
Green Tree Financial Corp.	1996-7	08/22/96	480.0	MH	✓	✓	✓		1
Green Tree Financial Corp.	1996-8	09/18/96	600.1	MH	✓	✓	✓		1
Green Tree Financial Corp.	1996-9	10/24/96	450.0	MH	✓	✓	✓		1
Green Tree Financial Corp.	1997-1	02/19/97	500.0	MH	✓		✓		1
Green Tree Financial Corp.	1997-2	03/13/97	550.0	MH	✓		✓		1
Green Tree Financial Corp.	1997-3	05/08/97	800.0	MH	✓		✓		1
Green Tree Financial Corp.	1997-4	06/19/97	520.0	MH	✓	✓	✓		1
Green Tree Financial Corp.	1997-5	07/24/97	550.0	MH	✓	✓	✓		1
Green Tree Financial Corp.	1997-6	09/04/97	1050.0	MH		✓	✓		1
Green Tree Financial Corp.	1997-7	10/15/97	550.0	MH	✓	✓			1
Green Tree Financial Corp.	1997-8	12/03/97	850.0	MH		✓	✓		1
Green Tree Financial Corp.	1998-1	01/28/98	450.0	MH	✓		✓		1
Green Tree Financial Corp.	1998-2	03/11/98	750.0	MH	✓	✓			1
Green Tree Financial Corp.	1998-3	04/22/98	500.0	MH		✓	✓		1
Green Tree Financial Corp.	1998-4	05/19/98	500.0	MH	✓		✓		1
Green Tree Financial Corp.	1998-5	06/18/98	356.4	MH	✓	✓			1
Green Tree Financial Corp.	1998-6	07/22/98	800.0	MH		✓	✓		1
Green Tree Financial Corp.	1998-7	09/10/98	850.0	MH	✓		✓		1
Green Tree Financial Corp.	1998-8	10/28/98	1350.0	MH	✓	✓			1
Green Tree Financial Corp.	1999-1	01/26/99	700.0	MH		✓	✓		1
Green Tree Financial Corp.	1999-2	03/11/99	1100.0	MH		✓	✓		1
Green Tree Financial Corp.	1999-3	05/06/99	800.0	MH		✓	✓		1
Green Tree Financial Corp.	1999-4	06/16/99	1000.0	MH		✓	✓		1
Green Tree Financial Corp.	1999-5	08/24/99	2000.0	MH		✓	✓		1
Green Tree Floorplan Rec. Master Trust	1999-1	10/01/99	637.0	AP	✓	✓	✓		3
Green Tree Home Eq. and Home Imp.	1998-B	03/26/98	550.0	HE		✓	✓		1
Green Tree Home Equity Loan Trust	1997-B	05/23/97	327.1	HE		✓	✓		1
Green Tree Home Equity Loan Trust	1998-C	05/20/98	500.0	HE		✓	✓		1
Green Tree Home Equity Loan Trust	1999-D	08/13/99	500.0	HE		✓	✓		1
Green Tree Home Imp. and HEL Trust	1997-A	03/20/97	519.4	HE		✓	✓		1
Green Tree Home Imp. and HEL Trust	1997-C	06/20/97	302.2	HE		✓	✓		1
Green Tree Home Imp. and HEL Trust	1997-D	08/27/97	750.0	HE		✓	✓		1
Green Tree Home Imp. and HEL Trust	1997-E	12/10/97	835.0	HE		✓	✓		1
Green Tree Home Imp. and HEL Trust	1998-D	08/14/98	1400.0	HE		✓	✓		1
Green Tree Home Imp. and HEL Trust	1998-E	11/17/98	1680.0	HE	✓		✓		1
Green Tree Home Imp. and HEL Trust	1998-F	12/16/98	425.3	HE	✓	✓			2
Green Tree Home Imp. and HEL Trust	1999-B	06/18/99	400.0	HE	✓	✓			1
Green Tree Home Imp. and HEL Trust	1999-C	06/24/99	1300.0	HE		✓	✓		1
Green Tree Home Improvement Loan Trust	1994-B1	06/27/94	105.0	HE	✓	✓			1

Issuer	Series	Date	Amount ($ mil.)	Asset Type	Moodys	S&P	Fitch	Duff	Credit Event
Green Tree Home Improvement Loan Trust	1994-B2	06/27/94	15.2	HE	✓	✓			3
Green Tree Home Improvement Loan Trust	1994-B-I	06/27/94		HE	✓	✓			3
Green Tree Home Improvement Loan Trust	1994-B-II	06/27/94		HE	✓				3
Green Tree Home Improvement Loan Trust	1994-C1	09/23/94	133.7	HE	✓	✓			1
Green Tree Home Improvement Loan Trust	1994-C2	09/23/94	12.5	HE	✓	✓			3
Green Tree Home Improvement Loan Trust	1994-C-I	09/23/94	146.2	HE	✓	✓			3
Green Tree Home Improvement Loan Trust	1994-C-II	09/23/94		HE	✓				3
Green Tree Home Improvement Loan Trust	1994-D	12/02/94	131.5	HE	✓	✓			1
Green Tree Home Improvement Loan Trust	1994-E	12/02/94	12.3	HE	✓	✓			3
Green Tree Home Improvement Loan Trust	1995-A	03/16/95	87.9	HE	✓	✓			1
Green Tree Home Improvement Loan Trust	1995-B	03/16/95	12.2	HE	✓	✓			3
Green Tree Home Improvement Loan Trust	1995-C	06/13/95	140.2	HE	✓				3
Green Tree Home Improvement Loan Trust	1995-D	09/14/95	173.8	HE	✓				3
Green Tree Home Improvement Loan Trust	1995-E	09/14/95	32.2	HE	✓				3
Green Tree Home Improvement Loan Trust	1995-F	12/12/95	132.7	HE	✓	✓			1
Green Tree Home Improvement Loan Trust	1996-A	03/07/96	93.7	HE	✓	✓			1
Green Tree Home Improvement Loan Trust	1996-B	03/07/96	25.1	HE	✓	✓			1
Green Tree Home Improvement Loan Trust	1996-C	06/19/96	292.4	HE		✓	✓		1
Green Tree Home Improvement Loan Trust	1996-C	06/19/96	292.4	HE		✓	✓		3
Green Tree Home Improvement Loan Trust	1996-D	09/17/96	367.7	HE		✓	✓		1
Green Tree Home Improvement Loan Trust	1996-E	09/17/96	27.1	HE		✓	✓		1
Green Tree Home Improvement Loan Trust	1996-F	12/18/96	478.0	HE		✓	✓		1
Green Tree Home Improvement Loan Trust	1999-E	09/13/99	600.0	HE		✓	✓		1
Green Tree Recrtn'l Equip & Consumer	1996-B	06/14/96	421.0	OT		✓	✓		3
Green Tree Recrtn'l Equip & Consumer	1996-D	12/18/96	380.0	OT		✓	✓		3
Green Tree Recrtn'l Equip & Consumer	1997-B	06/18/97	594.8	OT		✓	✓		3
Green Tree Recrtn'l Equip & Consumer	1997-C	09/08/97	500.0	OT		✓	✓		3
Green Tree Recrtn'l Equip & Consumer	1997-D	12/08/97	567.9	OT		✓	✓		3
Green Tree Recrtn'l Equip & Consumer	1998-A	03/20/98	500.0	OT		✓	✓		3
Green Tree Recrtn'l Equip & Consumer	1998-B	06/19/98	403.5	OT		✓	✓		3
Green Tree Recrtn'l Equip & Consumer	1998-C	09/04/98	800.0	OT		✓	✓		3
Green Tree Recrtn'l Equip & Consumer	1999-A	06/16/99	600.0	OT		✓	✓		3
Green Tree Recrtn'l, Equip & Consumer	1996-A	01/19/96	431.1	OT	✓	✓	✓		3
Green Tree Recrtn'l, Equip & Consumer	1996-B	06/14/96	421.0	OT		✓	✓		1
Green Tree Recrtn'l, Equip & Consumer	1996-C	09/12/96	364.4	OT		✓	✓		1
Green Tree Recrtn'l, Equip & Consumer	1996-D	12/18/96	380.0	OT		✓	✓		1
Green Tree Recrtn'l, Equip & Consumer	1997-A	03/14/97	250.0	OT	✓		✓		1
Green Tree Recrtn'l, Equip & Consumer	1997-B	06/18/97	594.8	OT		✓	✓		1
Green Tree Recrtn'l, Equip & Consumer	1997-C	09/08/97	500.0	OT		✓	✓		1
Green Tree Recrtn'l, Equip & Consumer	1997-D	12/08/97	567.9	OT		✓	✓		1
Green Tree Recrtn'l, Equip & Consumer	1998-A	03/20/98	500.0	OT		✓	✓		1
Green Tree Recrtn'l, Equip & Consumer	1998-B	06/19/98	403.5	OT		✓	✓		1
Green Tree Recrtn'l, Equip & Consumer	1998-C	09/04/98	800.0	OT		✓	✓		1
Green Tree Recrtn'l, Equip & Consumer	1999-A	06/16/99	600.0	OT		✓	✓		1
GreenPoint Credit Mfd. Hsg. Contract Trust	1999-5	11/23/99	540.0	MH	✓		✓		1
GreenPoint Credit Mfd. Hsg. Contract Trust	2000-1	03/02/00	340.0	MH	✓		✓		1
GreenPoint Credit Mfd. Hsg. Contract Trust	2000-3	05/12/00	719.2	MH		✓	✓		2
GreenPoint Credit Mfd. Hsg. Contract Trust	2001-1	03/26/01	271.7	MH	✓	✓			4
Heilig-Meyers Master Trust	1998-1	02/27/98	400.0	CP	✓	✓		✓	1
Heilig-Meyers Master Trust	1998-2	08/28/98	338.4	CP	✓	✓		✓	1
Heller Equipment Asset Receivables Trust	1999-1	04/14/99	380.7	EQ	✓		✓	✓	4
Heller Equipment Asset Receivables Trust	1999-2	12/08/99	365.5	EQ	✓		✓	✓	3
HFC Home Equity Loan Trust	1990-1	06/26/90	996.7	HE	✓	✓		✓	3
Hollywood Funding No. 4 Ltd.			33.6	OT		✓			2
Hollywood Funding No. 5 Ltd.			48.4	OT		✓			1
Hollywood Funding No. 6 Ltd.			100.7	OT		✓			1
ICON Equipment Lease Grantor Trust	1998-A	07/30/98	105.5	EQ			✓	✓	1

Issuer	Series	Date	Amount ($ mil.)	Asset Type	Moodys	S&P	Fitch	Duff	Credit Event
IMC Home Equity Loan Trust	1997-3	06/06/97	800.0	HE	✓	✓	✓		1
IMC Home Equity Loan Trust	1997-5	09/15/97	975.0	HE	✓	✓	✓		1
IMC Home Equity Loan Trust	1998-1	02/27/98	1000.0	HE	✓	✓	✓		1
IMC Home Equity Loan Trust	1998-5	08/27/98	500.0	HE	✓	✓	✓		3
Impac Secured Assets CMN Trust	1998-1	03/27/98	303.0	HE	✓		✓		3
Indymac Home Equity Loan Trust	1998-A	09/24/98	871.1	HE		✓	✓		3
Indymac Home Equity Loan Trust	2000-A	04/28/00	269.5	HE			✓		2
Indymac Home Equity Loan Trust	2000-C	11/21/00	450.0	HE	✓		✓		1
Indymac Home Equity Loan Trust	2001-A	02/28/01	350.0	HE	✓	✓	✓		1
Indymac Home Equity Loan Trust	2001-B	06/28/01	348.2	HE	✓	✓	✓		3
IndyMac Mfd. Hsg. Contract	1997-1	07/28/97	142.4	MH	✓		✓		1
IndyMac Mfd. Hsg. Contract	1998-1	03/05/98	160.9	MH	✓		✓		1
IndyMac Mfd. Hsg. Contract	1998-2	07/10/98	229.5	MH		✓	✓		1
JCP Master Credit Card Trust	1991-C			CP		✓			3
JCP Master Credit Card Trust	C	04/20/90	375.0	CP	✓	✓			3
JCP Master Credit Card Trust	D	09/11/90	425.0	CP	✓	✓			3
Jet Equipment Trust	1995-A	04/07/95	528.0	AC	✓	✓			2
Keystone Home Imp. Loan Remic Trust	1997-P3	12/04/97	182.1	HE	✓		✓		3
Keystone Home Imp. Loan Remic Trust	1997-P4	12/04/97	122.1	HE	✓		✓		3
Lease Investment Flight Trust	1	06/13/01	1429.0	AC	✓	✓	✓		2
Lease Investment Flight Trust	1W	11/13/03	37.4	AC		✓			3
Legal Settlement Trust	2001-1	05/17/01	50.5	OT	✓		✓		4
Legal Settlement Trust	2002-A	06/05/02	53.8	OT	✓		✓		4
Legal Settlement Trust	2003-1	02/04/03	20.6	OT	✓		✓		4
Lehman ABS Corp.	2001-B	10/26/01	1387.4	MH	✓	✓	✓		3
Lehman Home Equity Loan Trust	1998-1	02/06/98	132.6	HE	✓			✓	1
Lehman Mfd. Hsg. Asset-Backed Trust	1998-1	02/24/98	189.4	MH	✓		✓		3
Litigation Settlement Monetized Fee Trust	2001-1	02/05/01	308.1	OT	✓	✓	✓		3
Litigation Settlement Monetized Fee Trust	2001-1/B	02/01/02	71.3	OT	✓	✓			4
Litigation Settlement Monetized Fee Trust	2002-4	09/06/02	70.5	OT	✓		✓		4
Litigation Settlement Monetized Fee Trust	2002-5	06/14/02	38.5	OT	✓		✓		4
Long Beach Bank	1992-1	06/14/05	76.0	HE	✓	✓			1
Long Beach Home Equity Loan Trust	2000-LB1	08/28/00	1490.6	HE	✓		✓		3
LSI Auto Grantor Trust	1996-B	12/17/96	37.5	AS	✓	✓			4
LTV Steel Product LLC		03/02/98	250.0	OT			✓		1
LTV Steel Product LLC				OT		✓			1
MBNA Credit Card Trust	1990-A	03/20/90	500.0	CB	✓	✓		✓	3
Meridian Grantor Trust	1991-A	02/15/91	303.2	AP	✓	✓			3
Merit Securities Corp.	12-1	03/29/99	337.0	MH	✓		✓		1
Merit Securities Corp.	13	08/31/99	341.3	MH	✓		✓		1
Merrill Lynch Mortgage Investors Inc.	1990-A	03/06/90	140.4	MH		✓			4
Merrill Lynch Mortgage Investors Inc.	1990-C	06/06/90	149.2	MH		✓			4
Merrill Lynch Mortgage Investors Inc.	1990-F	09/05/90	176.5	MH		✓			4
Metris Master Trust	2000-1	03/14/00	515.5	CB	✓	✓	✓		3
Metris Master Trust	2000-2	07/20/00	663.0	CB	✓	✓	✓		3
Metris Master Trust	2000-3	10/19/00	552.5	CB	✓	✓	✓		3
Metris Master Trust	2001-1	02/02/01	610.0	CB	✓	✓	✓		3
Metris Master Trust	2001-2	05/24/01	750.0	CB	✓	✓	✓		3
Metris Master Trust	2001-3	08/15/01	718.2	CB	✓	✓	✓		3
Metris Master Trust	2001-4	10/15/01	552.5	CB	✓	✓	✓		3
Metris Master Trust	2002-1	02/05/02	263.5	CB	✓		✓		3
Metris Master Trust	2002-2	02/05/02	263.5	CB	✓		✓		3
Metropolitan Asset Funding Inc. II	1998-A	04/29/98	186.8	HE	✓		✓		4
Metropolitan Asset Funding Inc. II	1998-B	11/17/98	194.4	HE	✓		✓		3
Metropolitan Asset Funding Inc. II	1999-A	03/11/99	124.5	HE	✓			✓	3
Metropolitan Asset Funding Inc. II	2000-A	03/23/00	146.5	HE	✓			✓	1
Metropolitan Asset Funding Inc. II	2000-B	09/28/00	293.3	HE	✓		✓		2

Issuer	Series	Date	Amount ($ mil.)	Asset Type	Moodys	S&P	Fitch	Duff	Credit Event
Midlantic Home Equity Loan Trust	1990-A	06/22/90	250.0	HE	✓	✓			3
MMCA Auto Owner Trust	2001-3	10/03/01	1400.8	AP	✓	✓	✓		3
MMCA Auto Owner Trust	2001-4	12/06/01	570.2	AP	✓	✓	✓		3
MMCA Auto Owner Trust	2002-1	03/08/02	1636.9	AP	✓	✓	✓		3
MMCA Auto Owner Trust	2002-2	06/12/02	887.2	AP	✓	✓	✓		3
MMCA Auto Owner Trust	2002-3	08/15/02	594.8	AP	✓	✓	✓		3
Mutual Fund Fee Trust XIV	2000-4	11/07/00	122.6	OT	✓				3
National City Credit Card Trust	1990-A	03/07/90	350.0	CB	✓	✓			3
NextCard Credit Card Master Note Trust	2000-1	12/13/00	500.0	CB	✓	✓			1
NextCard Credit Card Master Note Trust	2001-1	04/20/01	700.0	CB	✓	✓			1
Northwest Airlines European Enhanced Equip	2001-2	06/27/01	395.8	EQ	✓	✓	✓		3
Northwest Airlines Pass Through Trusts	1996-1	06/03/96	524.5	AC	✓	✓	✓		3
Northwest Airlines Pass Through Trusts	1999-3	12/09/99	240.2	AC	✓	✓			3
Northwest Airlines Pass Through Trusts	2000-1	06/21/00	522.2	AC	✓	✓			3
Norwest Automobile Trust	1990-A	06/26/90	396.7	AP	✓	✓			3
NPF VI	2002-1	02/27/02	250.0	OT	✓				1
NPF VI	1998-2	08/10/98	125.0	OT				✓	1
NPF VI	1998-4	11/02/98	50.0	OT	✓		✓		1
NPF XII	2001-1	03/20/01	300.0	OT	✓		✓		1
NPF XII	2001-2	06/21/01	250.0	OT	✓		✓		1
NPF XII	2001-3	10/31/01	150.0	OT	✓				1
NPF XII	2001-4	11/16/01	150.0	OT	✓				1
NPF XII	2002-1	05/29/02	250.0	OT	✓				1
NPF XII	1999-1	03/10/99	100.0	OT				✓	1
NPF XII	1999-2	06/28/99	350.0	OT				✓	3
NPF XII	1999-3	11/24/99	200.0	OT				✓	1
NPF XII	2000-2	10/13/00	275.0	OT	✓		✓		1
NPF XII	2000-3	12/19/00	150.0	OT	✓				1
Oakwood Mortgage Investors Inc.	1995-A	06/16/95	145.6	MH		✓	✓		3
Oakwood Mortgage Investors Inc.	1995-B	10/18/95	187.1	MH		✓	✓		3
Oakwood Mortgage Investors Inc.	1996-A	02/16/96	143.8	MH		✓	✓		3
Oakwood Mortgage Investors Inc.	1996-B	07/22/96	215.7	MH		✓	✓		3
Oakwood Mortgage Investors Inc.	1996-C	10/18/96	270.8	MH		✓	✓		3
Oakwood Mortgage Investors Inc.	1997-A	02/21/97	185.1	MH		✓	✓		1
Oakwood Mortgage Investors Inc.	1997-B	05/15/97	178.5	MH		✓	✓		1
Oakwood Mortgage Investors Inc.	1997-C	08/14/97	234.6	MH		✓	✓		1
Oakwood Mortgage Investors Inc.	1997-D	11/14/97	252.4	MH	✓		✓		1
Oakwood Mortgage Investors Inc.	1998-A	02/20/98	197.9	MH	✓	✓			1
Oakwood Mortgage Investors Inc.	1998-B	05/28/98	300.0	MH		✓	✓		1
Oakwood Mortgage Investors Inc.	1998-C	08/20/98	309.0	MH	✓		✓		1
Oakwood Mortgage Investors Inc.	1998-D	11/03/98	319.4	MH	✓	✓			1
Oakwood Mortgage Investors Inc.	1999-A	01/14/99	351.3	MH	✓		✓		1
Oakwood Mortgage Investors Inc.	1999-B	05/11/99	255.6	MH	✓		✓		1
OMI Trust	1999-C	06/25/99	320.1	MH		✓	✓		1
OMI Trust	1999-D	09/03/99	296.2	MH	✓	✓			1
OMI Trust	1999-E	11/23/99	285.0	MH		✓	✓		1
OMI Trust	2000-A	03/28/00	316.9	MH		✓	✓		1
OMI Trust	2000-B	06/26/00	331.2	MH		✓	✓		1
OMI Trust	2000-C	09/26/00	258.6	MH	✓	✓			1
OMI Trust	2000-D	12/20/00	208.0	MH	✓	✓	✓		1
OMI Trust	2001-B	03/12/01	226.9	MH	✓		✓		1
OMI Trust	2001-C	05/23/01	170.1	MH	✓	✓			1
OMI Trust	2001-D	08/22/01	215.2	MH	✓	✓			1
OMI Trust	2001-E	11/30/01	159.2	MH	✓	✓			1
OMI Trust	2002-A	02/22/02	147.8	MH	✓	✓			1
OMI Trust	2002-B	05/20/02	221.0	MH	✓	✓			1
OMI Trust	2002-C	08/27/02	194.6	MH	✓	✓			1

Issuer	Series	Date	Amount ($ mil.)	Asset Type	Moodys	S&P	Fitch	Duff	Credit Event
Origen Mfd. Hsg. Contract	2001-A	03/20/01	163.4	MH	✓		✓		1
PBG Aircraft Trust		08/06/98	182.2	AC	✓	✓			3
Peachtree Franchise Loan LLC	1999-A	05/13/99	154.8	OT	✓		✓		1
Pegasus Aircraft Lease Securitization Trust	1999-1	03/02/99	667.0	AC	✓		✓	✓	2
Pegasus Aircraft Lease Securitization Trust	2000-1	03/08/00	938.0	AC	✓		✓	✓	1
Pegasus Aviation Lease Securitization III	2001-1	03/22/01	1127.0	AC	✓		✓		2
People's Bank Credit Card Master Trust	1997-2	09/17/97	500.0	CB	✓	✓	✓		4
People's Bank Credit Card Master Trust	1998-1	03/24/98	400.0	CB	✓	✓	✓		4
People's Bank Credit Card Master Trust	1999-1	09/22/99	400.0	CB	✓	✓	✓		4
Phoenix Receivables LLC	11-97	11/18/97	37.0	EQ			✓		4
Prime Finance Corp.	1996-A	12/13/96	66.3	EQ				✓	4
Prime Finance Corp.	1999-A	05/05/99	74.0	EQ				✓	2
Prime Finance Corp. Equip Lease Trust	1998-A	03/31/98	106.2	EQ			✓	✓	4
Putnam Lovell	1999-2	07/19/99	91.3	OT			✓		2
Rec. Structured Trust	2001-Calpoint	09/21/01	502.2	OT	✓		✓		2
Residential Asset Mortgage Products	2001-RS2	06/21/01	395.9	HE	✓		✓		4
Residential Asset Mortgage Products	2001-RZ3	08/23/01	51.2	HE	✓	✓	✓		4
Residential Asset Securities Corp.	1998-KS2	06/23/98	847.0	HE		✓	✓		4
Saxon Asset Securities Trust	1998-1	02/26/98	473.7	HE		✓	✓		4
Saxon Asset Securities Trust	1998-3	09/25/98	495.2	HE	✓		✓		4
Saxon Asset Securities Trust	1999-1	02/18/99	509.1	HE	✓		✓		4
Saxon Asset Securities Trust	1999-3	08/06/99	850.0	HE	✓		✓		3
Saxon Asset Securities Trust	1999-5	11/23/99	300.0	HE	✓		✓		3
Saxon Asset Securities Trust	2000-1	02/25/00	458.8	HE	✓		✓		3
Saxon Asset Securities Trust	2000-2	06/12/00	740.0	HE		✓	✓		3
Saxon Asset Securities Trust	2000-3	09/25/00	675.0	HE		✓	✓		2
Saxon Asset Securities Trust	2000-4	12/15/00	460.0	HE	✓		✓		3
Saxon Asset Securities Trust	2001-1	03/23/01	490.0	HE	✓		✓		3
Securitized Multiple Asset Rated Trust	1996-2	06/19/96	72.0	OT		✓			1
Securitized Multiple Asset Rated Trust	1996-3	08/27/96	100.0	OT	✓	✓			1
Securitized Multiple Asset Rated Trust	1996-4	12/31/96	85.0	OT	✓	✓			1
Securitized Multiple Asset Rated Trust	1997-1	02/21/97	65.0	OT	✓	✓			1
Securitized Multiple Asset Rated Trust	1997-2	03/31/97	150.0	OT		✓		✓	1
Securitized Multiple Asset Rated Trust	1997-3	04/15/97	147.0	OT				✓	1
Securitized Multiple Asset Rated Trust	1997-4	07/30/97	176.0	OT		✓	✓	✓	1
Securitized Multiple Asset Rated Trust	1997-5	09/29/97	190.0	OT		✓	✓	✓	1
Securitized Multiple Asset Rated Trust	1997-6	12/05/97	220.0	OT		✓	✓	✓	1
Securitized Multiple Asset Rated Trust	1998-1	02/27/98	206.1	OT		✓	✓	✓	1
Signal Securitization Corp.	1997-3	08/20/97	45.6	MH	✓		✓		3
Soundview Home Equity Loan	2001-1	04/04/01	106.7	HE		✓	✓		1
Southern Pacific Secured Assets Corp.	1997-2	06/16/97	375.0	HE		✓	✓	✓	1
Structured Asset Securities Corp.	1998-2	01/28/98	600.1	HE		✓	✓		4
Structured Asset Securities Corp.	1998-6	07/03/98	142.5	HE		✓			3
T&W Funding Co. VII LLC	1997-A	09/30/97	74.3	EQ				✓	1
T&W Funding Co. VII LLC	1998-A	04/01/98	85.5	EQ			✓		1
T&W Funding Co. VII LLC	1999-A	03/31/99	110.0	EQ			✓	✓	1
T&W Funding Co. X LLC	1998-B	10/06/98	77.4	EQ			✓		1
Team Fleet Financing Corp.	1997-1	05/02/97	500.0	AP	✓			✓	2
Team Fleet Financing Corp.	1998-2/3/4	06/19/98	1100.0	AP	✓	✓			4
Team Fleet Financing Corp.	1999-2/3/4	06/16/99	950.0	AP	✓	✓		✓	4
TFC Automobile Receivables Trust	2003-1	05/16/03	52.4	AS	✓	✓	✓		4
The Money Store Home Improvement Trust	1997-1	03/27/97	175.0	HE	✓	✓			3
The Money Store Home Improvement Trust	1997-2	06/26/97	250.0	HE	✓	✓			3
The Money Store Home Improvement Trust	1998-I	09/28/98	200.0	HE		✓	✓		3
The Money Store Trust	1998-A	03/26/98	1265.0	HE		✓	✓		1
The Money Store Trust	1998-B	08/17/98	1246.4	HE		✓	✓		1

Issuer	Series	Date	Amount ($ mil.)	Asset Type	Moodys	S&P	Fitch	Duff	Credit Event
The Money Store Trust	1998-B/1	08/17/98	523.3	HE		✓			3
Tobacco Settlement Authority	2001-A	10/25/01	40.0	OT	✓	✓			4
Tobacco Settlement Financing Corp.	2001-A	10/31/01	292.6	OT	✓	✓	✓		4
Tobacco Settlement Financing Corp.	2002-A	06/19/02	34.0	OT	✓	✓			4
Tobacco Settlement Financing Corp.	2002-B	06/17/02	35.6	OT	✓	✓	✓		4
Tobacco Settlement Revenue Management Authority	2001-A	03/08/01	200.0	OT	✓	✓	✓		4
Towers Financial Corporation		1990	56.5	OT				✓	1
Towers Financial Corporation		1991	41.5	OT				✓	1
Towers Financial Corporation		1991	50.0	OT				✓	1
Towers Financial Corporation		1992	24.5	OT				✓	1
Towers Financial Corporation		1992	24.5	OT				✓	1
Travelers Receivable Finance LLC	2000-1	11/20/00	21.3	OT	✓				2
Triton Aviation Finance	1A	06/22/00	805.0	AC	✓	✓	✓		1
Truck Engine Receivables Master Trust	2000-1	11/21/00	100.0	AP	✓	✓	✓		4
UCFC Funding Corporation	1997-RS1	03/31/97	6.3	MH	✓		✓		3
UCFC Mfd. Hsg. Contract Trust	1996-1	09/26/96	115.0	MH	✓		✓		1
UCFC Mfd. Hsg. Contract Trust	1997-1	03/25/97	75.0	MH	✓		✓		1
UCFC Mfd. Hsg. Contract Trust	1997-2	06/23/97	75.0	MH	✓		✓		1
UCFC Mfd. Hsg. Contract Trust	1997-3	09/24/97	75.0	MH	✓		✓		1
UCFC Mfd. Hsg. Contract Trust	1997-4	12/18/97	80.0	MH	✓		✓		1
UCFC Mfd. Hsg. Contract Trust	1998-1	03/24/98	100.0	MH	✓		✓		1
UCFC Mfd. Hsg. Contract Trust	1998-2	06/12/98	110.0	MH	✓		✓		1
UCFC Mfd. Hsg. Contract Trust	1998-3	09/24/98	150.0	MH		✓	✓		2
UCP LLC I/II	1999-1	09/03/99	375.3	EQ			✓		1
Unicapital LLC I/II	2000-1	03/28/00	301.5	EQ			✓		1
United Airlines Pass Through Certificates	2000-1	07/20/00	920.8	AC	✓	✓			2
Universal Credit Trust	1999-A	05/12/99	29.0	OT	✓			✓	3
University Support Services Inc.	1991-1	08/29/91	86.0	SL		✓			4
Vanderbilt Mortgage and Finance Inc.	1998-A	02/26/98	220.1	MH	✓		✓		3
Vanderbilt Mortgage and Finance Inc.	1998-B	05/21/98	220.6	MH	✓		✓		3
Vanderbilt Mortgage and Finance Inc.	1998-C	08/18/98	244.2	MH		✓	✓		3
Vanderbilt Mortgage and Finance Inc.	1998-D	11/06/98	287.9	MH		✓	✓		3
Vanderbilt Mortgage and Finance Inc.	1999-A	02/19/99	280.9	MH	✓		✓		3
Vanderbilt Mortgage and Finance Inc.	1999-B	05/20/99	518.9	MH		✓	✓		3
Vanderbilt Mortgage and Finance Inc.	1999-C	08/18/99	382.6	MH	✓		✓		3
Vanderbilt Mortgage and Finance Inc.	1999-D	11/23/99	287.2	MH	✓	✓			3
Vanderbilt Mortgage and Finance Inc.	2000-A	02/17/00	271.2	MH	✓		✓		3
Vanderbilt Mortgage and Finance Inc.	2000-C	08/16/00	264.5	MH	✓		✓		3
Vanderbilt Mortgage and Finance Inc.	2000-D	11/16/00	278.3	MH	✓		✓		3
Vanderbilt Mortgage and Finance Inc.	2001-B	08/14/01	400.0	MH	✓		✓		3
WMC Mortgage Loan Trust	1997-2	12/03/97	400.0	HE	✓	✓	✓		2
WMC Mortgage Loan Trust	1998-1	03/05/98	300.0	HE	✓	✓	✓		3
WMC Mortgage Loan Trust	1998-A	05/20/98	796.0	HE	✓	✓			3

— E N D —

VI. Recent Nomura Fixed Income Research

Fixed Income General Topics

- ABS Gold Coast Report 2004: Coverage of Selected Sessions of ABS East 2004 (21 October 2004)
- U.S. Fixed Income 2004 Mid-Year Outlook/Review (1 July 2004)
- Securitization Glossary (26 November 2002)

ABS/CDO

- Home Equity ABS Basics (1 November 2004)
- “The Bespoke [bispóuk]” - A Guide to Single-Tranche Synthetic CDOs (17 November 2004)
- Tranching Credit Risk (8 October 2004)
- CDOs in Plain English (13 September 2004)
- Correlation Primer (6 August 2004)
- ABS/MBS Disclosure Update #5: Reactions to the Comment Letters (4 August 2004)
- ABS/MBS Disclosure Update #4: Issues from ASF Sunset Seminar (13 May 2004)
- ABS/MBS Disclosure Update #3: Start Your Engines – Get Ready to Comment (10 May 2004)
- CDS Primer (12 May 2004)
- ABS/MBS Disclosure Update #2 (5 May 2004)
- ABS/MBS Disclosure Update (29 April 2004)

MBS

- FHA/VA Monthly (3 December 2004)
- FHA/VA Monthly (2 November 2004)
- GNPL Prepayments November Factor (10 November 2004)
- GNPL Prepayments October Factor (15 October 2004)
- Special Report ERISA Reform (29 September 2004)
- GNPL REMIC Factor Comparison (20 September 2004)
- GNPL Prepayments September Factor (20 September 2004)
- FHA/VA Monthly (20 September 2004)

Strategy

- CMBS Exposure to KB Toy Store Closings (16 November 2004)
- US Dollar Chartbook (12 November 2004)
- MBS Market Update: November Update (12 November 2004)
- Super-Senior Classes: A New Trend in the CMBS Market? (8 November 2004)
- Basel II – Changing Bank Risk-Based Capital Requirements (8 November 2004)
- ABC’s of CMO Floaters – Creation and Valuation (3 November 2004)
- Swap Spread Regression Model (1 November 2004)
- Is the Treasury Market Overbought? (29 October 2004)
- MBS Vega Durations (27 October 2004)
- Oil Prices – The Long Term Outlook (21 October 2004)
- Regional Home Prices – Part II (21 October 2004)
- MBS Market Check-Up: Mid-October Update (19 October 2004)
- TIPS: Underperformance Ahead? (7 October 2004)
- Regional Housing Markets – Some Hot, Some Not (23 September 2004)
- MBS Interest-Only Loans: Payment Shock Possible (23 September 2004)
- Corporate Spread Regression Model (23 September 2004)
- CMBS Default Study (13 September 2004)
- Dollar Rolls: A Refresher (13 September 2004)
- Agency Hybrid ARMs: Sector Overview (24 August 2004)
- Using the Call/Call Trade to Enhance MBS Returns (19 August 2004)
- Reviewing the “J” and “I” Curves for CMBS (12 August 2004)
- Commercial Real Estate Sector Update - Hotels (10 August 2004)
- Commercial Real Estate Sector Update - Industrial (4 August 2004)
- Value in Two-Tiered Index Bonds (TTIBs) (30 July 2004)
- Commercial Real Estate Sector Update - Multifamily (30 July2004)
- Commercial Real Estate Sector Update - Retail (29 July 2004)

Corporates

- Corporate Weekly - For the week ended 26 November 2004
- Corporate Relative Value (22 November 2004)
- U.S. Corporate Sector Review - September (6 October 2004)

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