# 2004 U.S. CDO Review/2005 Preview: Record Activity Levels Driven by Resecuritization CDOs and CLOs

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### **ACTIVITY SUMMARY**

# Full Year 2004

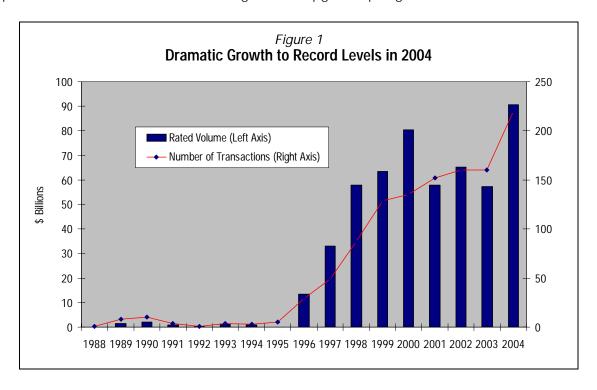
Led by a surge in the volume of resecuritization CDOs (those backed by other structured instruments) and CLOs, the U.S. CDO market enjoyed a record year in 2004, both in terms of the number of transactions completed and rated volume (*Figure 1*). The number of CDOs rated by Moody's jumped by nearly 38% to surpass the 200 mark for the first time. Even more impressively, rated volume surged by 58% to a level of just over \$90 billion.

The dramatic growth was spearheaded by resecuritizations (in both cash and synthetic form), which rose by more 50% in number and accounted for over 40% of rated transactions in 2004. CLOs and CDOs backed by bank or insurance-company trust preferred shares also contributed to the growth. By contrast, synthetic corporate CDO volume was down amid exceptionally narrow credit spreads that eliminated the incentive to structure multiple-tranche synthetics.

The CDO market also benefited from economy-wide factors in 2004. A sharp improvement in the corporate credit picture led to a corresponding improvement in CDO ratings performance, bolstering demand for CDO paper. This increased demand manifested itself in both the high volume of issuance and the narrowing of CDO liability spreads. Record debt issuance on both the corporate and structured finance sides also provided ample supply for CDO collateral pools.



Moody's downgraded 140 (non-pari-passu) CDO tranches in 2004, compared to 333 tranches in 2003, despite a larger volume of transactions outstanding during 2004. The improvement in CDO ratings mirrors that in the U.S. corporate sector, where the ratio of downgrades to upgrades plunged from 2.4:1 in 2003 to 0.7:1 in 2004.



# Q4 2004

Moody's rated a record 77 U.S. CDOs during the fourth quarter of 2004, easily exceeding the 60 rated in the previous quarter, and the 58 rated in the final quarter of 2003. At a record \$36.8 billion, rated volume was also up by more than 50% against both the \$23.2 billion level of Q3 2004, as well as the \$23.5 billion figure for the year-earlier period.

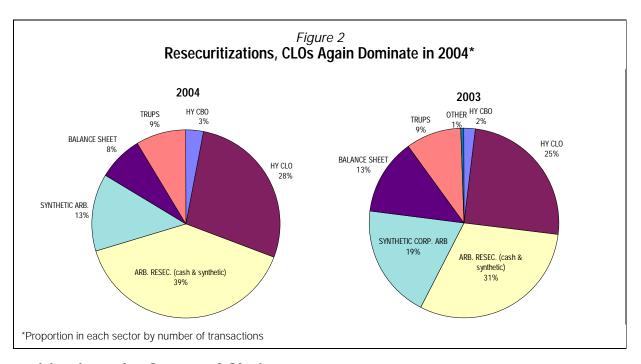
# **Activity Outlook for 2005**

The sort of growth we observed in 2004 does not appear to be sustainable in 2005. For one, the credit picture improved dramatically in 2004, and though we do not expect a sudden deterioration in 2005, the same sort of improvement is very unlikely to be repeated. Second, asset spreads are still near historically narrow levels and will tend to dampen arbitrage incentives, not withstanding a reduction in CDO funding costs. But several factors argue for continued growth: the forward calendar is healthy, synthetics that do not depend on spread differences continue to get done and investments that might be viewed as alternatives to CDOs are also tightly priced. Barring market disruptions, we thus anticipate increases in volume on the order of 5-15% in 2005.

#### TRANSACTION MIX

### Full Year 2004

For all of 2004, 203 of 220, or 92% of U.S. CDOs, were of the arbitrage variety. The proportion of balance-sheet transactions thus fell from 14% in 2003 to just 8% in 2004 (*Figure 2*). Of the balance-sheet transactions that were completed, roughly half were middle-market CLOs done on behalf of non-bank lenders; such transactions are increasingly important sources of funding for lenders to smaller firms. The remaining balance-sheet transactions represented an assortment of mechanisms for larger institutions to hedge either structured finance or derivative-related exposures.



#### Resecuritizations the Sector of Choice

Among arbitrage transactions, resecuritization CDOs were clearly the vehicle of choice in 2004. Including resecuritizations in both cash-flow and synthetic form, such transactions accounted for 44% of all arbitrage CDOs in 2004. (Across all transactions, the share of resecuritizations was 41%, up from 35% in 2003.) About one-fifth of resecuritizations took synthetic form, a small, but growing, proportion.

Resecuritizations generally fell into one of three camps: 1) cash-flow CDOs backed by 'mezzanine' structured instruments, typically with a high concentration of **Baa**-rated residential mortgage/HEL collateral, 2) cash-flow CDOs backed by highly rated ABS and other CDOs, often financed in large part by a senior money-market tranche and 3) synthetic CDOs referencing highly rated ABS and a basket of less-highly-rated CDO tranches. Growth was particularly pronounced in the latter two categories. The ballooning resecuritization tally partly reflects a more favorable arbitrage vis-à-vis corporate collateral (more below), despite the narrowing of spreads across all sectors. It also parallels the general growth in structured debt--*The Financial Times* recently reported that U.S. structured debt issuance exceeded corporate issuance for the first time in 2004, much of it associated with residential mortgage product.<sup>1</sup>

#### Other Cash-Flow Sectors Contribute to Growth

CLOs also enjoyed healthy growth in 2004, accounting for 30% of arbitrage transactions. Though declining loan spreads caused the CLO arbitrage to diminish over the course of the year, demand was bolstered by the continuing strong performance of these transactions. Indeed, consistent with that performance record, recent Moody's research suggests that corporate loans have historically enjoyed lower average loss rates than have like-rated corporate bonds.<sup>2</sup>

- 1 "Asset-backed bonds come of age: New issuance in 2004 overtakes traditional methods for first time," Financial Times, December 29, 2004, p. 31.
- 2 See "Credit Loss Rates on Similarly Rated Loans and Bonds," Moody's Special Comment, December 2004.

Trust preferred CDOs saw modest growth in 2004 as the number of these transactions rose from 15 to 19, again comprising nearly 10% of U.S. CDO issuance. The share of trust-preferred CDOs, which provide regulatory capital for banks and insurance firms, may well have peaked since the number of suitable institutions that have not yet accessed the market via trust-preferred CDOs appears to be declining.

After a dramatic decline in issuance over the past few years, high-yield CBOs made a modest comeback in 2004. Seven such deals were completed during the second half of the year, though only three were traditional cash-flow CBOs. The remaining transactions were either synthetic (referencing the Dow Jones CDX.NA.HY index) or took market-value (MV) form.

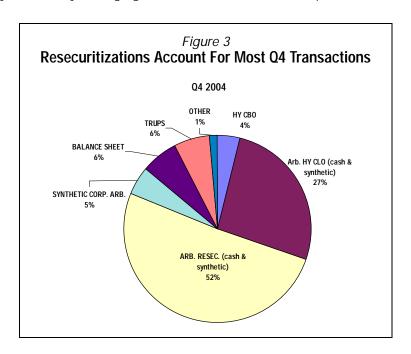
Indeed, 2004 also saw a mini-resurgence in MV CDO activity. Half a dozen MV CDOs were completed during the year, compared to a single MV transaction during 2003. Three of the MV CDOs were collateralized fund obligations, while the others were backed by corporate or structured debt.

# **Fewer Corporate Synthetics**

By contrast, the number of synthetic CDOs that primarily reference corporate names declined in 2004. The decline was consistent with the lack of any real arbitrage incentive to structure such transactions. Of those deals that were done, many were single-tranche CDOs. Such transactions are less dependent on spread levels because the banks that offer these to end users can typically delta hedge exposures by entering into single-name credit default swaps, credit index transactions, or some combination of the two.

# Q4 2004

Nearly all (72) of the 77 CDOs that closed during the fourth quarter were arbitrage-related transactions. Of these, the vast majority were either resecuritizations or CLOs (*Figure 3*). More precisely, 40 of the CDOs were resecuritizations, 33 in cash-flow and 7 in synthetic form. All 21 fourth-quarter CLOs were cash-flow transactions. The remaining arbitrage transactions were a mix of synthetics referencing corporate names, trust-preferred CDOs and even a few high-yield cash-flow CDOs. After a modest pick-up earlier in the year, there were no CDOs primarily backed by emerging-market credits in the latest period.<sup>3</sup>



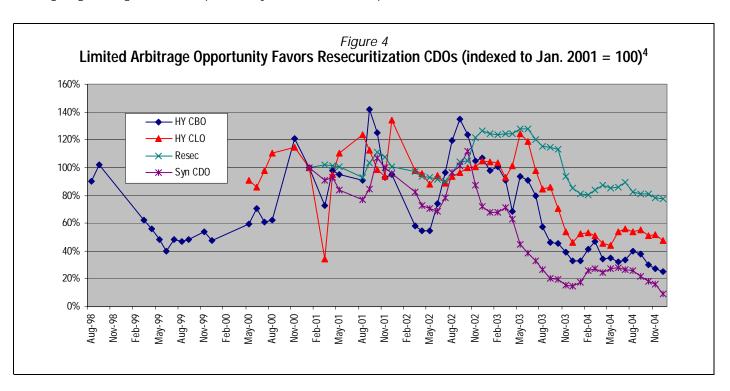
The remaining four transactions completed during the quarter could be characterized as balance-sheet CDOs. Three of these were funding transactions for nonbank lenders to middle-market firms, while the last was a securitization of a mixed collateral pool on behalf of a European bank.

<sup>3</sup> By "emerging market," we refer primarily to countries with foreign currency ceilings below **A2**. We do not distinguish here between emerging-market bonds and loans.

# **Growth Occurs Despite Limited Arbitrage Opportunity**

Spreads across nearly all fixed-income sectors remained narrow during 2004. For CDOs, this meant that collateral was relatively expensive. At the same time, the cost of CDO liabilities was low by the standards of recent years, but the net impact was nonetheless a limited opportunity to earn arbitrage gains from the structuring of CDOs (*Figure 4*).

To put some numbers against these trends, **Aaa** CDO liability spreads typically declined by about 15 basis points for both resecuritizations and CLOs during 2004. At the **Baa** level, the corresponding figure was about 70 basis points for both resecuritizations and CLOs. But on the asset side of the transaction, spreads on **Baa**-rated home equity tranches contracted by roughly 70 basis points and **Baa**-rated Manufactured Housing tranches by a whopping 200 basis points during 2004. **B1**-rated syndicated loan spreads narrowed by roughly 70 basis points over the year. Finally, a more significant rebound in HY CBO activity was discouraged by an average tightening of **B1-B3** spreads by around 50 basis points.



Why did the market exhibit healthy growth amid the limited incentive? In part, the answer is simply that investors had few attractive alternatives. Just as CDOs faced expensive collateral, so investors saw spreads narrow on both corporate and structured instruments. Investors also responded to *relative* spreads in the sense that the resecuritization sector, which offered the most attractive arbitrage opportunity within the U.S. CDO market relative to recent years, did indeed enjoy the most rapid growth. In comparison with more traditional sectors within Structured Finance (e.g., credit card or auto ABS, prime RMBS), CDO liabilities continue to trade at wider spreads than do like-rated tranches issued within other structured transactions.

CDO growth was also facilitated by an ample supply of collateral in 2004. Leveraged loan volume reached a record \$472 billion in 2004, compared to \$329 billion in 2003.<sup>5</sup> U.S. high-yield bond volume also hit a new peak at \$110 billion, though overall U.S. corporate issuance--at \$244 billion--fell a bit short of its 2003 record level. As noted earlier, Structured Finance volume surpassed corporate issuance for the first time in 2004.

<sup>4</sup> Figure 4 presents the expected return (present value of cash flows vs. initial investment) at closing for equity investors in each of the indicated transaction types, where the expected return is the average across all binomial scenarios, weighted by the likelihood of the scenario occurring. The calculation thus takes account of the cost of liabilities (assuming Aaa, Baa and equity classes only), the yields available on the relevant asset classes, as well as the swap curve prevailing at the time the hypothetical transaction closed. The result for each asset class is presented as an index with the value as of January 2001 set to 100.

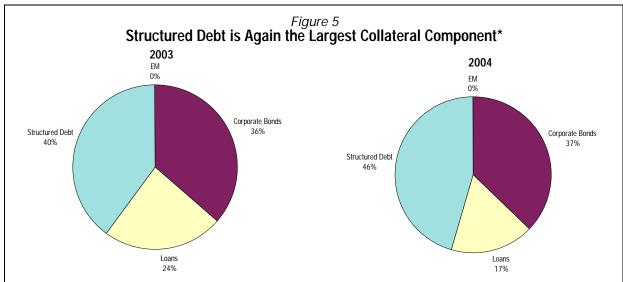
<sup>5</sup> Source: Loan Pricing Corp.

#### **COLLATERAL MIX**

# Full Year 2004

As one might expect from the 2004 transaction mix and the abundance of structured collateral, structured debt again accounted for the single largest segment of the U.S. CDO collateral pool in 2004. Specifically, structured instruments comprised 44% of aggregate collateral, compared to 39% for corporate bonds and 17% for loans (*Figure 5*).

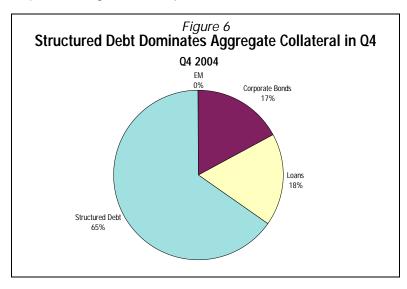
The loan share is perhaps understated in the sense that we include in collateral not only actual cash assets held by a CDO, but also the reference pools of synthetic deals. Some synthetics, including single-tranche deals, may reference multi-billion dollar pools of corporate or structured credits. Since the vast majority of CLOs are cash-flow deals, measured CLO collateral volume does not benefit from this 'leverage' effect.



Figures Weighted by volume of assets backing (or referenced by) each transaction. Totals may not add to 100% due to rounding. "Bonds" and "Loans" are those issued by entities domiciled in countries rated **A2** or better. "Emerging Market" instruments are bonds or loans issued by entities domiciled in countries rated below **A2**. We treat synthetic balance-sheet CDO collateral as a pool of loans (which are usually hedged via these structures), though the reference and deliverable credits may actually be bonds. Synthetic arbitrage CDOs are assumed to reference bonds, unless information to the contrary exists.

### Q4 2004

With the sharp increase in resecuritization CDOs in Q4 2004, structured instruments accounted for nearly two-thirds of CDO collateral in the latest period (*Figure 6*). This was in sharp contrast to the second and third quarters of 2004, when corporate obligations comprised most CDO collateral.



### **NEW DEVELOPMENTS IN 2004**

# Not a Particularly Innovative Year

As a mature segment within Structured Finance, the U.S. CDO market can now exhibit impressive growth—as it did during 2004--in the absence of major structural innovations. In a sense, the market has benefited from the innovations of previous years, including structural protections that have been put in place to better balance the interests of debt and equity investors. These protections have contributed to the demand for CDO paper, though the impact of a much improved corporate credit environment was probably more important in 2004.

# **High-Grade Resecuritizations Become the Norm**

Resecuritzations CDOs backed by highly rated collateral, and typically financed by a senior money-market tranche, first surfaced in 2002. In 2004, these transactions actually outnumbered resecuritizations backed by mezzanine structured assets. One likely reason is that CDO demand for **Baa**-rated structured paper caused mezzanine spreads to tighten significantly, making more senior structured tranches relatively attractive. Also, as recently highlighted by Moody's research, highly rated structured tranches have experienced loss rates that are similar to Moody's idealized targets, while **Baa**-rated tranche losses have exceeded the idealized targets. Hence collateral performance concerns, exacerbated by downgrades of some older mezzanine-tranche-backed resecuritzations, has encouraged investors to shift toward the newer structures.

### First U.S. Muni CDO

The first U.S. municipal CDO was completed in 2004. Alpine III was a synthetic CDO that enabled its sponsor (UBS) to lay off risk that arose from its municipal derivative transactions. It does not appear that this sector is likely to take off any time soon since there is little in the way of a muni arbitrage opportunity. Instead, we may see a handful of transactions that serve to hedge or dispose of muni risk, or exploit some temporary arbitrage within a limited segment of the market. A second synthetic muni CDO (C-Symbol) closed in early 2005.

# **Modest Comeback for Two CBO Sectors**

2004 also saw modest activity in two sectors that had been nearly dormant in recent years: high-yield CBOs and Emerging Market (EM) CDOs. As elsewhere, improved collateral performance has elicited interest in such transactions, but the increased cost of collateral (the narrowing of spreads) has discouraged a stronger resurgence in these sectors. A total of seven cash or synthetic high-yield CBOs closed in 2004, compared to just three in 2003. A lone EM transaction ('GEM VII') closed as well vis-à-vis none in the prior year. It does appear that at least of handful of EM deals will be done in 2005.

One innovation that helped nudge growth in the high-yield sector was the introduction of indices that reference such credits (e.g, the Dow Jones CDX.NA.NY index). Indeed, it is possible that just as the market for investment-grade cash-flow CDOs largely disappeared in favor of synthetics, there may be a migration away from (the few remaining) high-yield cash-flow CDOs toward synthetics. Synthetics can be arranged more quickly and more cheaply and are increasingly amenable to delta hedging via single-name CDS and/or index trades. It is conceivable that CDS could also be used to delta-hedge cash high-yield CDO exposures—and could thus spur some cash-flow activity--but determining the appropriate hedge is much more difficult than in the synthetic case.

# Synthetics Driven by Bespoke Deals, Correlation Trades

Continuing with the trend that began in 2003, full-capital-structure synthetic CDOs were rare in 2004. Rather, the market continued to focus on single-tranche bespoke synthetics in which an end-investor takes a view on a number of credits, while the dealer that structures the bespoke deal delta hedges its exposures via CDS. Also popular were synthetic CDOs of CDOs that reflect market views on correlation. In some cases, these transactions have consisted of reference credits that were themselves bespoke CDO tranches.

# **PROSPECTS FOR 2005**

We anticipate further growth in U.S. CDO volume during 2005, but the pace is likely to fall well short of the 2004 rate. It appears unlikely that spreads can contract much further, particularly if credit conditions do not continue

6 See "Default and Loss Rates of Structured Finance Securities: 1993-2003," Moody's Special Comment, September 2004.

to improve. CDO liabilities should still trade wide of those for more traditional structured instruments. At the edges, a few sectors that began to reawaken in 2004 should contribute to growth. Naturally, we anticipate that resecuritzations and CLOs will again account for the bulk of activity in 2005.

# Resecuritizations

Simply because of the importance of resecuritizations within the CDO market, the biggest question mark for overall growth is probably the pace of activity in this subsector. On the supply side, it is unlikely that collateral will grow at anything like the 2004 pace since interest rates appear to be on the rise, dampening residential mortgage/HEL activity. To offset a possible compression of spreads in the RMBS sector, resecuritization CDOs may shift toward more CDO collateral. There may also be a further shift toward more highly-rated collateral financed with **P-1**-rated CDO liabilities.

# **CLOs**

CLO growth should be respectable next year as spreads stabilize. It seems likely that middle-market CLOs will continue to grow as smaller firms use such vehicles to gain access to the capital markets and specialty finance companies rely on CLOs for funding. Larger banks may also take further steps to securitize middle-market loans. The development of structures that accommodate *pro rata* loans in 2004 should also augment growth in 2005 by expanding the universe of potential collateral.

# **Synthetics**

With investment-grade corporate spreads still tight, a few innovations may drive synthetic growth in 2005. One area that seems poised to grow is hybrid transactions that reference both corporate and structured credits. Hybrid deals might appeal to those seeking additional diversity within a portfolio. They may also allow investors to express views on correlation across sectors, an area that is not well understood and thus subject to divergent opinions.

A second means of achieving diversity is the inclusion of short positions within the portfolio, a practice that also seems to be on the rise. To the extent that a short position is taken with respect to a credit for which no corresponding long position exists in the portfolio, the efficacy of the short position will depend on credit correlation. Conceivably, longs and shorts could be taken with reference not only to individual names, but also to indices. In an actively managed transaction, a manger could offset a long position that no longer seems appropriate via a short position in the same name.

# **Other Sectors**

Finally, as suggested above, the minor rebound in the high-yield CBO and Emerging Market sectors is likely to continue into 2005, contributing to growth. We may also see a modest boost from a smattering of activity in the muni CDO and CFO sectors. However, trust-preferred CDOs, which have been a significant contributor to growth over the past few years, are more likely to become a drag on the market in 2005.

### **RATING ACTIONS**

### Full Year 2004

Moody's downgraded 140 tranches in 70 U.S. CDOs during 2004, less than half the respective figures (331 tranches in 154 CDOs) for 2003.<sup>7</sup> Moody's also upgraded 17 tranches in 14 transactions during 2004, similar to the 2003 totals.

The sharp drop in the number of downgrades is primarily attributable to the improvement in the ratings performance within the U.S. corporate sector. For example, Moody's trailing 12-month speculative-grade default rate dropped from 5.40% in December 2003 to 2.69% in December 2004. The figure is forecast to bottom out around 30 basis points lower this spring, before rising nearly a full percent toward the end of 2005. As we noted above, the downgrade:upgrade ratio fell from nearly 2.4:1 in December 2003 to about 0.7:1 in December 2004.

7 For the purpose of this count, we combine *pari passu* tranches.

The improved performance of corporate collateral was partially offset by a wave of downgrades in the collateral backing resecuritizations. As a result, downgrades of resecuritization CDO tranches actually rose ffrom 25 in 2003 to 77 in 2004. The weakness was concentrated in deals exposed to the manufactured housing, franchise loan, aircraft and equipment lease, and tobacco settlement sectors.

#### Q4 2004

Moody's downgraded 63 tranches within 31 U.S. CDO during the fourth quarter, while upgrading four tranches within four transactions. Moody's also placed 55 tranches within 22 CDOs on watch for possible downgrade in Q4 2004, and four tranches in three deals on watch for possible upgrade. At the end of the quarter, 94 tranches in 40 CDOs were on watch for possible downgrade and 10 tranches in nine deals were on watch for possible upgrade.

Table 1 presents a list of the changes in CDO tranche ratings during Q4 2004.8

<sup>8</sup> Data for previous quarters are available in earlier editions of this quarterly review, as well as on the moodys.com web site.

# Table 1 CDO Rating Actions During Q4 2004

Transaction	Tranche	Initial deal rating date	Previous Rating	Date of Action	New Rating	Downgrade or Upgrade
Beacon Hill CBO Inc.	eacon Hill CBO Inc. \$9.25M Class B-1 Second Priority Senior Secured Floating Rate Notes		B1	8-0ct-04	С	D
Beacon Hill CBO Inc.	\$10.00M Class B-2 Second Priority Senior Secured Fixed Rate Notes		B1	8-0ct-04	С	D
Beacon Hill CBO Inc.	nc. \$7.30M Class C Senior Subordinated Fixed Rate Notes		Caa1	8-0ct-04	С	D
ML CBO Series 1997-C-3	\$168.80M Class A Floating Rate Senior Secured Notes	14-Mar-97	Caa2	11-0ct-04	Ca	D
ML CBO VI (Cayman) Ltd	\$172.80M FLT Sr. Sec. Flt. Rt. Notes, Ser. 1996 C-2 Cl. A	31-0ct-96	Caa1	11-0ct-04	Ca	D
Pacific Coast CDO Ltd.	\$96.00M Class B Bonds	25-Sep-01	Aa3	11-0ct-04	A2	D
Pacific Coast CDO Ltd.	\$21.00M Class C-1 Bonds	25-Sep-01	Ba3	11-0ct-04	Caa2	D
Pacific Coast CDO Ltd.	\$9.00M Class C-2 Bonds	25-Sep-01	Ba3	11-0ct-04	Caa2	D
Sutter CBO 2000-2 Ltd.	\$16.00M Variable Rate Notes	11-Jan-01	Baa2	14-0ct-04	Ba1	D
Sutter CBO 2000-2 Ltd.	\$24.00M Fixed Rate Notes	11-Jan-01	Baa2	14-0ct-04	Ba1	D
Sutter CBO 2000-2 Ltd.	\$19.00M Fixed Rate Notes	11-Jan-01	Ba2	14-0ct-04	Caa1	D
Duke Funding II, Ltd.	\$4.00M Class D Subordinated Notes	30-0ct-01	Ba2	15-0ct-04	Ba3	D
MKP CBO II, Ltd.	\$18.00M Class B Second Priority Senior Secured Floating Rate Notes	20-Dec-01	Aa2	15-0ct-04	А3	D
MKP CBO II, Ltd.	\$12.50M Class C-1 Third Priority Senior Secured Floating Rate Notes	20-Dec-01	Baa2	15-0ct-04	B1	D
MKP CBO II, Ltd.	\$12.50M Class C-2 Third Priority Senior Secured Fixed Rate Notes	20-Dec-01	Baa2	15-0ct-04	B1	D
TIAA Structured Finance	\$27.50M Class B Floating Rate Notes	14-Dec-00	Aa2	22-0ct-04	Aa3	D
CDO I, Ltd.	\$35.00M Class C Fixed Rate Notes					
TIAA Structured Finance CDO I, Ltd.		14-Dec-00	Baa2	22-0ct-04	B1	D
Zermatt CBO Limited	\$215.25M Class A Senior Secured Floating Rate Notes	2-Sep-98	Baa2	28-0ct-04	A3	U
ABS Capital Funding, Ltd.	Capital Funding, Ltd. \$13.00M Class B-1 Second Priority Floating Rate Notes		Ba1	29-0ct-04	B1	D
ABS Capital Funding, Ltd.	\$15.00M Class B-2 Second Priority Fixed Rate Notes	20-Dec-00	Ba1	29-0ct-04	B1	D
Varick Structured Asset Fund, Ltd.	set \$50.00M Class A-1 First Priority Secured Floating Rate Notes		Aa3	29-0ct-04	Ba1	D
Varick Structured Asset Fund, Ltd.	\$25.00M Class B-1 Secured Floating Rate Notes		Caa1	29-0ct-04	С	D
Varick Structured Asset Fund, Ltd.	\$7.00M Class B-2 Secured Fixed Rate Notes	29-Sep-00	Caa1	29-0ct-04	С	D
Bristol CDO I Ltd.	\$13.00M Class C Floating Rate Notes	11-0ct-02	A2	1-Nov-04	Ba2	D
PPM America High Yield (Cayman Islands) CBO I	\$448.80M Class A-1 Senior Secured Floating Rate Notes	2-Mar-99	А3	3-Nov-04	Ba1	D
PPM America High Yield (Cayman Islands) CBO I	\$55.70M Class A-3 Senior Secured Fixed Rate Notes	2-Mar-99	Caa1	3-Nov-04	С	D
LYNX 2002-I, Ltd.	\$20.00M Class D Floating Rate Notes	8-May-02	Ba2	4-Nov-04	В3	D
Bleecker Structured Asset Funding, Ltd.	\$45.00M Class A-1 First Priority Senior Secured Floating Rate Notes	28-Mar-00	А3	5-Nov-04	Baa3	D
Bleecker Structured Asset Funding, Ltd.	er Structured Asset \$315.00M Class A-2 First Priority Senior Secured Floating Rate Notes		A3	5-Nov-04	Baa3	D
Bleecker Structured Asset Funding, Ltd.	cer Structured Asset \$40.00M Class B Second Priority Senior Secured Floating Rate Notes		В3	5-Nov-04	Ca	D
Dawn CDO I, Ltd.	\$28.70M Class B Second Priority Floating Rate Notes	17-Sep-02	Aa1	5-Nov-04	А3	D
Oceanview CBO I, Ltd.			Baa2	5-Nov-04	Baa3	D
Oceanview CBO I, Ltd.			Baa2	5-Nov-04	Baa3	D
PPM America Structured Finance CBO I Ltd.	erica Structured \$256.50M Class A-1 Floating Rate Notes		Aa3	5-Nov-04	A3	D
PPM America Structured Finance CBO I Ltd.	America Structured \$10.00M Class B Fixed Rate Senior Subordinated Notes		Caa3	5-Nov-04	С	D
PPM America Structured Finance CBO I Ltd.	\$12.50M Class A-2A Fixed Rate Notes	29-Jun-00	Ba3	5-Nov-04	Caa2	D

# Table 1 CD0 Rating Actions During Q4 2004 (Continued)

Transaction	Tranche	Initial deal rating date		Date of Action	New Rating	Downgrade or Upgrade
PPM America Structured Finance CBO I Ltd.	\$5.00M Class A-2B Floating Rate Notes	29-Jun-00	Ba3	5-Nov-04	Caa2	D
Magnus Funding Ltd	\$202.00M Floating Rate Global Notes		Caa1	10-Nov-04	С	D
Norse CBO, Ltd.			А3	10-Nov-04	Aa3	U
Mid Ocean CBO 2001-1 Ltd.	\$215.00M Class A-1L Floating Rate Notes.	13-Aug-98 25-Oct-01	Aaa	12-Nov-04	Aa3	D
Mid Ocean CBO 2001-1 Ltd.	\$50.00M Class A-1 Fixed Rate Notes		Aaa	12-Nov-04	Aa3	D
Mid Ocean CBO 2001-1 Ltd.	\$10.00M Class B-1L Floating Rate Notes	25-0ct-01	Baa3	12-Nov-04	B2	D
Mid Ocean CBO 2001-1 Ltd.	\$15.00M Class A-2L Floating Rate Notes	25-0ct-01	Aa2	12-Nov-04	Baa1	D
Beacon Hill CBO II Ltd.	\$160.50M Class A-1 Senior Secured Floating Rate Notes	19-Jul-01	Aaa	15-Nov-04	A1	D
Beacon Hill CBO II Ltd.	\$160.50M Class A-2 Senior Secured Floating Rate Notes	19-Jul-01	Aaa	15-Nov-04	A1	D
Beacon Hill CBO II Ltd.	\$14.00M Class B Second Priority Floating Rate Notes	19-Jul-01	Ba1	15-Nov-04	B1	D
Solstice ABS CBO, Ltd.	\$50.00M Class B Second Priority Floating Rate Notes	19-Apr-01	Aa2	15-Nov-04	А3	D
Solstice ABS CBO, Ltd.	\$12.50M Class C Mezzanine Floating Rate Notes	19-Apr-01	Baa2	15-Nov-04	B2	D
Solstice ABS CBO, Ltd.	\$9.75M Class 1 Pass-Through Fixed Rate Notes	19-Apr-01	Baa2	15-Nov-04	В3	D
Solstice ABS CBO, Ltd.	\$13.25M Preferred Shares	19-Apr-01	Ba3	15-Nov-04	С	D
MKP CBO I, Ltd.	\$250.00M Class A-1L Floating Rate Notes	8-Feb-00	Aaa	17-Nov-04	Aa3	D
MKP CBO I, Ltd.	\$7.00M Class B-1L Floating Rate Notes	8-Feb-00	Baa3	17-Nov-04	В3	D
MKP CBO I, Ltd.	\$7.38M Class B-1A Fixed Rate Notes	8-Feb-00	Baa3	17-Nov-04	В3	D
MKP CBO I, Ltd.	\$25.00M Class A-2L Floating Rate Notes	8-Feb-00	Aa3	17-Nov-04	Baa3	D
Sunrise CDO I, Ltd.			Aa2	23-Nov-04	А3	D
Sunrise CDO I, Ltd.	\$17.05M Class C Third Priority Senior Secured Floating Rate Notes	19-Dec-01	Ba2	23-Nov-04	Caa2	D
Saybrook Point CBO, Limited	ok Point CBO, \$18.00M Class B Floating Rate Senior Secured Notes		Aa2	24-Nov-04	A2	D
Saybrook Point CBO, Limited	\$252.00M Class A Floating Rate Senior Notes	6-Feb-00	Aaa	24-Nov-04	Aa1	D
Saybrook Point CBO, Limited	\$18.00M class C Fixed Rate Senior Secured Notes	6-Feb-00	Baa2	24-Nov-04	Caa1	D
ML CBO VIII (Cayman) Ltd	\$160.00M Class A Floating Rate Senior Secured Notes	22-May-97	В3	30-Nov-04	Caa2	D
ML CBO XXIV (Cayman) Ltd.	\$95.00M Class A-1 Senior Secured Floating Rate Notes	11-Mar-99	Aa1	30-Nov-04	Aaa	U
ML CBO XXIV (Cayman) Ltd.	\$43.00M Class A-2 Senior Secured Fixed Rate Notes	11-Mar-99	Aa1	30-Nov-04	Aaa	U
Diversified Asset Securitization Holdings I, LP	3		Aa1	3-Dec-04	A2	D
Diversified Asset Securitization Holdings I, LP			Aa1	3-Dec-04	A2	D
Diversified Asset Securitization Holdings I, LP	rsified Asset Securiti- \$27.00M Class B Senior Secured Fixed Rate Notes		В3	3-Dec-04	С	D
NYLIM Stratford CDO 2001-1 Ltd.	A Stratford CDO \$32.00M Class C Collateral Notes		Baa3	6-Dec-04	B1	D
NYLIM Stratford CDO 2001-1 Ltd.	Al Stratford CDO \$16.00 Collateral Notes		Ba3	6-Dec-04	Ca	D
Diversified Asset Securitization Holdings III, LP	rsified Asset Securiti- \$215.00M Class A-1L Floating Rate Notes		Aaa	10-Dec-04	Aa2	D
Diversified Asset Securitization Holdings III, LP			Aaa	10-Dec-04	Aa2	D

# Table 1 CD0 Rating Actions During Q4 2004 (Continued)

Transaction	Tranche	Initial deal rating date	Previous Rating	Date of Action	New Rating	Downgrade or Upgrade
Diversified Asset Securitization Holdings III, LP	\$18.50m Class B-1L Floating Rate Notes	28-Jun-01	Baa2	10-Dec-04	В3	D
Diversified Asset Securitization Holdings III, LP	\$30.00M Class A-3L Floating Rate Notes	28-Jun-01	Aa2	10-Dec-04	Baa1	D
ABS Capital Funding, Ltd.	\$13.00M Class B-1 Second Priority Floating Rate Notes	20-Dec-00	B1	15-Dec-04	Caa2	D
ABS Capital Funding, Ltd.	\$15.00M Class B-2 Second Priority Fixed Rate Notes	20-Dec-00	B1	15-Dec-04	Caa2	D
Independence II CDO, Ltd.	\$17.00M Class C Secured Floating Rate Notes	26-Jul-01	Baa2	16-Dec-04	B1	D
Independence II CDO, Ltd.	\$16.70M Preference Shares	26-Jul-01	В3	16-Dec-04	С	D
Van Kampen CLO I, Limited	an Kampen CLO I, Limited \$312.50M Class A Revolving Credit Facility Promissory Notes		Aa2	21-Dec-04	Aaa	U
Van Kampen CLO I, Limited	ampen CLO I, Limited \$312.50M Class B Revolving Credit Facility Promissory Notes		Aa2	21-Dec-04	Aaa	U
Van Kampen CLO I, Limited	CLO I, Limited \$375.00M Floating Rate Global Notes		Aa2	21-Dec-04	Aaa	U
Diversified Asset Securitization Holdings II L.P.	\$50.00M Class A-2L Floating Rate Notes	13-Sep-00	Aa3	22-Dec-04	A1	D
Diversified Asset Securitization Holdings II L.P.	\$37.00M Class B-1 Fixed Rate Notes	13-Sep-00	Ва3	22-Dec-04	Caa3	D
E*Trade ABS CDO I, Ltd.	\$25.00M Class B Third Priority Senior Secured Floating Rate Notes	26-Sep-02	Aa1	22-Dec-04	Aa2	D
E*Trade ABS CDO I, Ltd.	ade ABS CDO I, Ltd. \$5.00M Composite Shares		Baa3	22-Dec-04	B1	D
E*Trade ABS CDO I, Ltd.	ade ABS CDO I, Ltd. \$12.50M Preference Shares		Baa3	22-Dec-04	В3	D
E*Trade ABS CDO I, Ltd.	CDO I, Ltd. \$9.50M Class C-1 Secured Floating Rate Notes		Baa1	22-Dec-04	Baa3	D
E*Trade ABS CDO I, Ltd.	O I, Ltd. \$3.40M Class C-2 Fixed Rate Notes		Baa1	22-Dec-04	Baa3	D
MKP CBO II, Ltd.	II, Ltd. \$12.50M Class C-1 Third Priority Senior Secured Floating Rate Notes		B1	22-Dec-04	Caa2	D
MKP CBO II, Ltd.	\$12.50M Class C-2 Third Priority Senior Secured Fixed Rate Notes	20-Dec-01	B1	22-Dec-04	Caa2	D

# Appendix 1 CDOs Rated By Moody's During Q4 2004\*

Closing Date	Issuer	Rated Volume (\$MM)	Manager	Agent	
10/1/2004	Streeterville ABS CDO, Ltd.	983	Vanderbilt Capital Advisors, LLC	Merrill Lynch	
10/5/2004	High Grade Structured Credit CDO 2004-1	129	[static pool]	Credit Suisse First Boston	
10/12/2004	Glacier Funding CDO II Ltd.	485	Terwin Money Mgmt. LLC	Merrill Lynch	
10/14/2004	Navigator CDO 2004	470	Antares Asset Mgmt., Inc.	Citigroup	
10/19/2004	Trapeza VII, Ltd.	320	[static pool]	CSFB/SunTrust	
10/20/2004	Blackrock Senior Income Series	364	Blackrock Financial Management Inc.	JP Morgan Chase	
10/20/2004	House of Europe Funding III, Ltd.	1,242	Hypo Real Estate Bank Aktiengesellschaft	WestLB AG, New York	
10/20/2004	Inman Square Funding I, Ltd.	239	TCW Asset Management Co.	Morgan Stanley	
10/21/2004	Davis Square III	1502	TCW Asset Management Co.	Goldman Sachs	
10/21/2004	Landmark IV CDO, Ltd.	266	Aladdin Asset Management LLC	Bear Stearns	
10/25/2004	[Private synthetic CDO	256	[European Bank]	[European Bank]	
10/25/2004	Credit Protection Trust 74	250	[static pool]	Bank of America	
10/26/2004	Dow Jones CDX.NA.HY.3 Trusts Single-Tranche CDS	50	[static pool]	UBS LImited	
10/26/2004	Pinnacle Point Funding	987	State Street Research & Management Co.	Citigroup	
10/26/2004	Sherwood Funding	550	Church Tavern Advisors, L.L.C.	JP Morgan Chase	
10/26/2004	TIERS DJ CDX 2004-35	100	[static pool]	Citigroup	
10/27/2004	Atrium III CDO	459	CSFB Alternative Capital, Inc.,	Credit Suisse First Boston	
10/27/2004	NYLIM Flatiron CLO 2004-1 Inc.	322	New York Life Investment Management LLC	Goldman Sachs	
10/27/2004	Porter Square CDO II, Ltd.	353	TCW Asset Management Co.	Credit Suisse First Boston	
10/27/2004	Reservoir Funding	495	MBIA Capital Management Corp.	Merrill Lynch	
10/28/2004	ACES 2004-7	5	[static pool]	Morgan Stanley	
10/28/2004	Babson CLO Ltd. 2004-II	412	Babson Capital Management LLC	Morgan Stanley	
10/28/2004	Laguna ABS CDO	1221	Pacific Investment Management Company	UBS Warburg	
10/28/2004	Straits Global ABS CDO I, Inc.	384	Declaration Mgmt. & Research LLC	Merrill Lynch	
10/29/2004	Capital Source Commercial Loan Trust 2004-2	1000	CapitalSource	Wachovia Securities	
10/29/2004	KLIO II	165	Bear Stearns Asset Management	Citigroup	
11/2/2004	Black River CFO	200	Black River Asset Management LLC	Morgan Stanley	
11/2/2004	Tricadia CDO 2004-2, Ltd.	186	Tricadia CDO Management, LLC	Bank of America Securities LLC	
11/3/2004	Mercury CDO 2004-1	742	Fund America Mgmt. Corp. (Chotin)	Merrill Lynch	
11/3/2004	Southport CLO	375	Pacific Management Investment Company LLC	Lehman Brothers	
11/5/2004	Ares Enhanced Loan Investment Strategy, Ltd.	650	Ares Management LLC	JP Morgan Chase	
11/9/2004	LCM II LTD.	331	Lyon Capital Management LLC	Merrill Lynch	
11/10/2004	Cheyne High Grade ABS CDO, Ltd.	1000	Cheyne Capital Management Limited	Wachovia Securities	
11/10/2004	Hillcrest ABS CDO	425	State Street Research & Mgmt. Co.	JP Morgan Chase	
11/12/2004	CORDS 2004-4	20	[static pool]	Morgan Stanley	
11/17/2004	REPACS Trust Series Bayshore I	36	[static pool]	Swiss Re Financial Products	
11/18/2004	Premium Loan Trust I, Ltd.	259	LightPoint Capital Mgmt. LLC	Institutional Credit Partners LLC	
11/18/2004	Skytop CLO Ltd.	74	Invesco Senior Secured Mgmt., Inc.	Citigroup	
11/18/2004	Stockbridge CDO Ltd.	236	Dynamic Credit Partners LLC	Citigroup	
11/18/2004	Tropic CDO IV, LTD	319	[static pool]	Bear Stearns	
11/21/2004	Paragon CDO, Ltd.	125	Rabobank International	Rabobank	
11/23/2004	Millerton ABS CDO, Ltd.	300	Hyperion Capital Management, Inc.	Credit Suisse First Boston	

# Appendix 1 CDOs Rated By Moody's During Q4 2004\* (Continued)

Closing Date	Issuer	Rated Volume (\$MM)	Manager	Agent	
11/24/2004	Cogswell CDO	1000	[European Bank affiliate]	Lehman Brothers	
11/29/2004	U.S. Capital Funding III, Ltd.	221	StoneCastle Partners	Sandler O'Neill & Partners	
11/30/2004	REPACS Trust Series Bayshore II	5	[static pool]	Swiss Re Financial Products	
11/30/2004	Trainer Wortham First Republic CBO V, Limited	338	Trainer, Wortham & Company, Incorporated	Credit Suisse First Boston	
12/1/2004	Hewett's Island CDO II, Ltd.	314	CypressTree Investment Management Co., Inc.	BroadStreet Group LLC	
12/2/2004	ACAS Business Loan Trust 2004-1	410	American Capital Strategies (servicer)	Wachovia Securities	
12/2/2004	Callidus Debt Partners CLO Fund III, Ltd.	366	Callidus Capital Management LLC	JP Morgan Chase	
12/2/2004	Jupiter CDO	742	Maxim Advisory LLC	Merrill Lynch	
12/2/2004	Summer Street	382	GE Asset Management	Citigroup	
12/2/2004	TABS 2004-1	493	Tricadia CDO Management LLC	Merrill Lynch	
12/8/2004	Gemstone CDO, Ltd.	424	HBK Investments, L.P.	Lehman Brothers	
12/8/2004	Green Lane CLO	457	Guggenheim Investment Mgmt., LLC	Wachovia Securities	
12/8/2004	Kirkwood CDO 2004-1 Ltd.	134	[static pool]	Bear Stearns	
12/8/2004	Pacifica CDO IV, LTD.	283	Alcentra Inc.	Bear Stearns	
12/9/2004	Wind River CLO	456	McDonnell Investment Mgmt., LLC	Deutsche Bank Securities	
12/10/2004	McKinley Funding, Ltd.	993	Vertical Capital Investment Advisors	Citigroup	
12/14/2004	First 2004-II CLO, Ltd.	350	TCW Asset Management Company	JP Morgan Securities	
12/15/2004	Chatham Light CLO, Ltd.	106	Sankaty Advisors, LLC	Citigroup	
12/15/2004	GSC Partners CDO Fund V, Limited	519	Greenwich Street Capital Partners, L.P.	UBS Securities, LLC	
12/15/2004	Preferred Term Securities XVI, Ltd	550	[static pool]	First Tennessee	
12/15/2004	Witherspoon CDO Funding, Ltd.	982	Princeton Advisory Group/Structured Asset Investors	Wachovia Securities	
12/15/2004	Zenith Funding, Ltd.	1486	ACA Management, L.L.C.	Citigroup	
12/16/2004	Cimarron CDO	1005	AIG Global Investment Group	JP Morgan Securities	
12/16/2004	Dunhill ABS CDO	482	Vanderbilt Capital Advisors, LLC	Merrill Lynch	
12/16/2004	Fortress ABS Opportunities, Ltd.	549	Drawbridge Special Opp. Advisor (Fortress)	IXIS Securities North America	
12/16/2004	Friedberg/Milstein Private Capital Fund I	464	FriedbergMilstein LLC	Merrill Lynch	
12/20/2004	Avenue CLO Fund, Ltd.	376	Avenue Capital Mgmt. II, LLC	Bear Stearns	
12/20/2004	Margate CDO	975	Delaware Investment Advisers	UBS Securities, LLC	
12/21/2004	ALESCO Preferred Funding VI, Ltd.	631	Cohen Bros. Financial Management, L.L.C.	Merrill Lynch	
12/21/2004	Stone Tower CDO Ltd.	273	Stone Tower Debt Advisors LLC	Bear Stearns	
12/21/2004	Whitney CLO I, Ltd.	392	Centre Pacific, LLC	Bear Stearns	
12/22/2004	E*Trade ABS CDO III, Ltd.	302	E*Trade Global Asset Mgmt.	Merrill Lynch	
12/22/2004	Field Point I and II, Ltd.	675	Silver Point Capital, L.P.	IXIS Securities North America	
12/14/2005	Belle Haven ABS CDO	978	NIBC Credit Management Inc.	UBS Securities	
12/29/2004	Ischus	383	Ischus Capital Management, LLC	Credit Suisse First Boston	

<sup>\*</sup> The volume of collateral backing these transactions is significantly larger than the volume of rated liabilities. In cash-flow CDOs, the equity is normally unrated. In synthetics, the supersenior tranche is usually unrated.

