CDOS WITH SHORT-TERM TRANCHES: Moody's Approach to Rating Prime-1 CDO Notes

AUTHORS:

Karen Mueller
Vice President/
Senior Analyst
(212) 553-1439
Karen.Mueller@moodys.com

Pooja Bharwani
Assistant Vice President/
Analyst
(212) 553-7135
Pooja.Bharwani@moodys.com

Rodrigo Araya
Senior Vice President
(212) 553-1494
Rodrigo.Araya@moodys.com

CONTACTS:

Everett Rutan
Senior Vice President
(212) 553-4808
Everett.Rutan@moodys.com

Jonathan Polansky
Managing Director
(212) 553-1657
Jonathan.Polansky@moodys.com

Yvonne Fu
Managing Director
(212) 553-7732
Yvonne.Fu@moodys.com

Gary Witt
Managing Director
(212) 553-4352
Gary.Witt@moodys.com

WEBSITE:
www.moodys.com

CONTENTS

OVERVIEW

During the past few years, Moody's has rated a number of collateralized debt obligation transactions (CDOs) that issue **Prime-1** rated short-term remarketed notes or asset-backed commercial paper (ABCP) (together "short-term notes"). CDO managers have included these short-term tranches in their CDO structures partly in response to increased investor demand and partly to reduce the CDO's cost of funding in response to tightening spreads between the underlying collateral pool and the interest rates payable on the CDO's liabilities.

Through the end of 2005, Moody's has rated approximately 60 CDO transactions in the U.S. that issue **Prime-1** rated short-term tranches. *Table 1* summarizes the number of CDOs with short-term tranches rated by Moody's and the total dollar volume since 2000.[1] *Table A1* in the Appendix provides additional detail with respect to CDO transactions that issue short-term tranches. As seen in *Table 1*, total issuance of short-term notes has increased dramatically, both in volume and in number of transactions, since the first rated transaction in 2000.

1 The upsize of Klio Funding II Ltd. and Putnam Structured Product CDO 2002-1 Ltd. are counted as separate transactions in *Table 1* since the initial transactions and the upsizes occurred in different years.

This report describes two different alternatives used by CDOs to issue short-term notes and details the process for remarketing or reissuing these notes. It also addresses the typical forms of liquidity and credit support available in CDO structures for short-term notes as well as relevant aspects of Moody's rating approach.

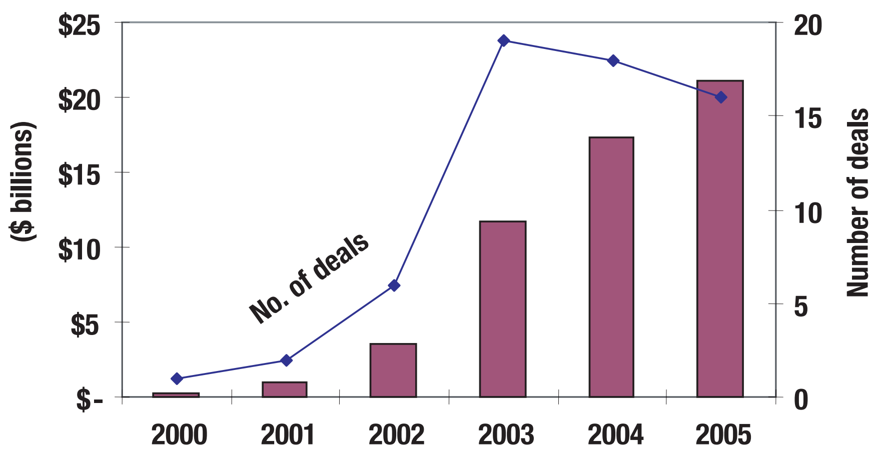
Table 1

CDO Transactions issuing Short-Term Notes

Year	Number of CDO Transactions issuing Short-Term Tranches	Total Aggregate Balance of Short-Term Tranches
2000	1	$300,000,000
2001	2	$1,016,000,000
2002	6	$ 3,537,250,000
2003	19	$ 11,741,410,000
2004	18	$ 17,294,300,000
2005	16	$ 21,103,780,000

Figure 1

Issuance of Short-Term Notes by CDOs Rated by Moody's since 2000



Unless otherwise stated, ***short-term notes*** *refers to either the remarketed notes or ABCP issued by a CDO transaction.*

MOTIVATION TO ISSUE SHORT TERM TRANCHES FROM CDOS

PPM America High Grade CBO I (December 2000), was the first transaction to issue short-term notes in the CDO market. Not long afterwards, Blue Heron Funding I Ltd. (October 2001) was the first high-grade structured finance CDO (SF CDO) to issue short-term notes initiating a trend that has yet to subside. Since then, a number of CDOs have issued ABCP as well as remarketed notes in tight spread environments to reduce the overall cost of funding and tap the large CP investor base.

Of the 60 CDOs listed in *Table A1*, the large majority are high-grade SF CDOs. When issuing short-term tranches, CDO managers have preferred high-grade SF CDOs to mezzanine deals due to their larger average size and greater leverage opportunities. Leverage is much higher in a high-grade CDO, implying that a small decrease in the overall funding cost can lead to a substantial increase in equity returns.

TYPICAL CDO STRUCTURES WITH SHORT-TERM TRANCHES

A short-term tranche is usually the senior or super-senior tranche of a CDO transaction issued by the same special purpose vehicle ("SPV") that issues the long-term liabilities. The short-term notes issued by the CDO are generally rated **Prime-1** and the payment dates of these notes may or may not match the payment dates of the long-term tranches of the CDO transaction.[2] In addition to this type of structure, Moody's has rated a few transactions in which the **Aaa**-rated senior tranche of a CDO transaction is sold to a different bankruptcy-remote SPV, which in turn issues the short-term notes. This is commonly referred to as a "repackage" or "repack" transaction.[3]

Most short-term notes issued by CDOs are either issued as remarketed notes or as ABCP. The first type of structure was more common in older vintage CDOs (2001-2003) whereas CDOs that issue ABCP have become more prevalent recently (2004-2005). Both types of structures are discussed in this report.

Short-Term Notes Have Short-Term and Sometimes Long-Term Ratings

In contrast to the term notes normally issued by a CDO, which are assigned long-term ratings by Moody's, the short-term notes are assigned a short-term rating - typically **Prime-1**. Sometimes, the short-term notes are assigned both a **Prime-1** and a long-term **Aaa**-rating.[4] The **Prime-1** rating of the short-term tranche addresses timely and full payment of principal and interest due on each payment date and at the final maturity date, with consideration of all grace periods.[5] The long-term rating, on the other hand, is based on an expected loss analysis for the CDO tranches, i.e., it does not address timeliness of payments due to the notes, but rather the ultimate payment of principal and interest. For example, the failure to pay a promised interest payment when due does not constitute a loss if it is capitalized and paid in full at a later date. Moody's expected loss analysis considers both the probability of default as well as the severity of loss in the event of a default.[6]

FEATURES OF SHORT-TERM TRANCHES ISSUED BY CDOS

To be eligible as money-market fund investments, the maturity of the short-term notes cannot exceed 397 days from the issuance date. This maturity restriction includes all grace periods for payment of principal and interest on any interim payment date or the final maturity date of the notes.

Another unique feature of short-term tranches issued by CDOs is that due to their shorter maturities - compared to the long-term tranches issued by the CDO - the short-term notes must be remarketed to investors on a periodic basis. The remarketing period varies for each transaction, but cannot exceed 397 days. For ABCP issued by a CDO, ABCP will "roll" on each ABCP maturity date. In other words, the proceeds of newly-issued ABCP will be used to pay the maturing ABCP on such date. In both cases, structural protections in the CDO transaction are aimed at full and timely payment of the maturing ABCP notes in the event of either a failed remarketing of the short-term notes or the inability to "roll" new ABCP.

PUT OPTION PROVIDES LIQUIDITY SUPPORT TO SHORT-TERM CDO TRANCHES

Liquidity for the short-term notes is often in the form of a put option provided by a **Prime-1** rated counterparty, using the standard ISDA Master Agreement for derivative transactions. A schedule and confirmation to the ISDA Master Agreement specifies the terms and conditions of the liquidity support being provided by the put option. The put counterparty is generally the derivatives desk of a **Prime-1** rated financial institution which has experience in the CDO market.[7]

2 There have been some CDOs where the short-term notes are paid on a monthly basis while the long term notes are paid quarterly.

3 One example of such an arrangement is the Descartes CDO Limited transaction that closed in December 2003. A portion of the **Aaa**-rated long-term senior notes issued by the CDO were used as collateral by Descartes Funding Trust, a Delaware SPV to issue **Prime-1**-rated short-term notes.

4 It is not required that the long-term ratings (if one is assigned) be **Aaa**. The Class A Notes from Blue Heron Funding II, Ltd., for instance, were assigned a **Aa1** long-term rating along with the **Prime-1** short-term rating (see *Table A1* in the Appendix)

5 Grace periods for payment of principal and interest on the short-term notes are discussed on page 7.

6 For more information on Moody's approach to rating CDO transactions, refer to "Moody's Approach to Rating Multisector CDOs" Moody's *Special Report*, Sept. 2000 and "Moody's Modeling Approach to Rating Structured Finance Cash Flow CDO Transactions", Moody's *Rating Methodology*, Sept. 2005.

7 Citibank N.A., WestLB AG, AIG Financial Products, Societé Générale and Wachovia Bank, N.A. have most frequently acted as put providers for these types of transactions. *Table A2* in the Appendix summarizes the number of transactions and volume of short-term notes issued by CDOs that are covered by each of these put counterparties.

The put counterparty, subject to certain conditions, is required to purchase the short-term notes at face value, including any accrued and unpaid interest, if a failed remarketing or a failed settlement of newly issued short-term notes occurs. For CDOs that issue ABCP, if the ABCP notes cannot be rolled on an ABCP maturity date, then the put counterparty makes a payment under the put in an amount sufficient to cover the face amount of maturing ABCP and in turn, receives newly-issued long-term notes that replace the maturing ABCP. In other instances, the put counterparty may opt to receive newly-issued ABCP instead of long-term notes. This is more likely to occur if the inability to roll ABCP is due to short-term unfavorable market issuance conditions that will be cured in a short period of time.

The **Prime-1** rating depends on two factors. The CDO's underlying structure and its collateral provide the credit support and the put option provides the liquidity necessary to attain the **Prime-1** rating on the short-term notes. Under certain circumstances, some of which could be credit related, the put provider is not required to make payments and purchase the term notes. These events, also called *outs to funding* under the put, must be carefully analyzed to ensure that they are consistent with the **Prime-1** rating assigned to the short-term notes. Moody's evaluation of these *outs to funding* is described in more detail on page 7.

Since the **Prime-1** rating of the short-term notes is highly dependent on the rating of the put counterparty, a downgrade of the short-term rating and non-replacement of the put counterparty will most likely result in a downgrade of the rating on the short-term notes, though not necessarily of the long term rating, if one exists. To mitigate the risk of default, Moody's expects that the put counterparty satisfy minimum ratings requirements (e.g., **A1** and **Prime-1** for counterparties with long-term and short-term ratings outstanding) and if the minimum rating is put on watch for downgrade, the counterparty is generally required to post collateral in an amount sufficient to cover its obligations under the put agreement. Furthermore, a downgrade below a certain level (e.g., **A3** or **Prime-2** for counterparties with long-term and short-term ratings outstanding) generally requires that the counterparty replace itself at its own cost.

CDO TRANSACTIONS THAT ISSUE ABCP

Short-term notes issued by a CDO are commonly in the form of **Prime-1** rated ABCP. The ABCP tranche is normally the senior-most tranche in the CDO capital structure and may be *pari passu* or senior to the **Aaa**-rated long term tranches issued by the transaction. Since the maturity dates of ABCP are 397 days or less, ABCP will likely mature on a date between payment dates for the CDO transaction.

ABCP issued by CDOs is usually issued at a discount and matures at par with no interest coupon payments, in contrast with remarketing notes, which are always issued at par and bear interest. In addition, in ABCP issued by CDOs, the CP can be issued with flexible maturities at each re-issuance date since they are re-issued on a continuous basis, in most cases, ranging from overnight up to 90 days as discount or 270 days as interest-bearing floaters. In remarketing structures, the maximum maturities are most commonly one year and the remarketing dates or maturities of the remarketed notes always coincide with the CDO's long-term payment dates.

Furthermore, CDOs with ABCP tranches are typically structured with a CP tranche size of $900 million or greater which is an important liquidity consideration for investors. Remarketing CDO structures most commonly issue only a few hundred million of short-term notes.

CDOs with ABCP tranches are usually compared to traditional multiseller ABCP conduits and Structured Investment Vehicles (SIVs). All three continuously issue ABCP. The CDOs and the SIVs tend to invest in high-grade ABS, while the CDOs and the multiseller conduits both have third-party full liquidity support. However, high-grade CDOs that issue ABCP typically have better average credit quality portfolios and higher credit enhancement for their senior **Aaa** tranche than ABCP conduits or SIVs. CDOs also provide investors with greater portfolio disclosure and transparency and have significantly more trading and reinvestment restrictions and limitations than ABCP conduits and SIVs.

Interest Payments on ABCP

An interest rate swap may cover timing mismatches between the interest payments generated by the underlying collateral and the interest due on the ABCP (i.e. the issuance discount to par).

Ensuring timeliness of interest payments is essential for Moody's to assign a **Prime-1** rating to the ABCP. Long-term ratings of CDO tranches do not address timeliness of interest payments but rather the ultimate payment of interest and principal. In order to assign a **Prime-1** rating to the ABCP, the CDO short-term analysis for these notes must assess both timely and full payment of interest due on each interest payment and maturity date. If failure to pay interest is an "out" under the put agreement, this event must have a low probability of occurrence. If a grace period exists for interest payments in the CDO transaction, then the swap counterparty must accept this condition. The structural protections in the CDO transaction should ensure timely payment of interest or the grace period must be included in defining the payment date for the ABCP.

When modeling the transaction for rating purposes, Moody's assumes ABCP funds at the maximum allowable interest rate specified by the transaction's legal documents. This maximum rate generally includes the maximum spread paid to ABCP investors, the put premium and the dealer's or remarketing agent's fees. Though the likelihood of funding at the maximum allowable rate may be small and/or limited in time, the occurrence of such an event coincides with high loss scenarios of the underlying collateral. Moody's believes that the ratings assigned to the ABCP should be sufficiently robust under such circumstances.

Put Option Ensures Payment of Maturing ABCP

As indicated earlier, liquidity support for the ABCP is typically in the form of a put option provided by a **Prime-1** rated put counterparty. On each ABCP maturity date, the CDO transaction issues new ABCP - the proceeds of which are used to pay maturing ABCP on such date. If, for any reason, ABCP cannot be issued such that the proceeds of newly-issued ABCP will cover the face amount of maturing ABCP, then the put counterparty will purchase ABCP or newly-issued long-term notes equal to the maturing face amount. This may occur if the issuer is unable to issue ABCP that meets the ABCP issuance conditions, such as an inability to issue ABCP at a coupon rate less than the specified maximum.[8] Similarly, if there is a failed settlement of ABCP on the issuance date as a result of a CP market disruption or a failure of any ABCP investor to remit funds to purchase the ABCP, then the put counterparty is required to purchase ABCP in an amount equal to the face amount of maturing ABCP on such date.

The put option does not provide credit support for the ABCP. The credit quality and cash flows of the underlying collateral support the principal and interest payments due on the maturing ABCP. The purpose of the put option is to provide liquidity to cover timing mismatches between payments due on the maturity date of the ABCP and the cash flows from the underlying collateral of the CDO. In most transactions, the put will become unavailable to redeem maturing ABCP if the credit quality of the collateral deteriorates beyond a certain point.

CDO TRANSACTIONS THAT ISSUE PRIME-1 RATED REMARKETED NOTES

Instead of issuing ABCP, the CDO transaction may issue remarketed notes.[9] Similar to ABCP issued by a CDO transaction, these remarketed notes are rated **Prime-1** and are *pari passu* or senior to the **Aaa**-rated senior tranche of the CDO. Below these senior tranches will be a number of subordinate tranches. These subordinate tranches provide some, if not all, of the credit support for the senior tranches of the CDO.

The payment dates on the remarketed notes typically coincide with the payment dates on the CDO transaction, which may be on a monthly, quarterly or semi-annual basis. Unlike long-term debt, the short-term notes are remarketed to investors on a regular basis. The remarketing periods also coincide with the payment dates and typically end a few days prior to each CDO payment date. The principal of the remarketed notes is payable on the maturity date.

8 Other examples of such conditions, in addition to the inability of the CDO to roll CP at a coupon rate less than the specified maximum put option strike rate, are the occurrence of a Downgrade Condition of the put provider or the existence of an Early Termination Event, as specified in the transaction documents.

9 The Remarketed Notes referred to in this report are short-term notes which carry a Moody's **Prime-1** rating. Some transactions issue long-term notes that are remarketed or auctioned on a periodic basis. These notes, typically referred to as Auction-Rate Notes, have only a long-term rating and not a Moody's short-term rating. This report does not address these Auction-Rate Notes.

Interest Payments on Remarketed Notes

On each payment date, interest proceeds generated by the collateral must be sufficient to cover interest due on remarketed notes in order to satisfy Moody's **Prime-1** rating criteria. The transaction could also incorporate a hedge or other structural mitigants to cover any potential basis risk. For example, in the case where a CDO has monthly payment dates on the notes, but a large concentration of quarterly and semi-annually paying assets, the transaction might include a basis swap, reserve account or some other feature to ensure adequate liquidity in the deal.

Similar to ABCP, timeliness of interest payments on the remarketed notes is equally important for a **Prime-1** rating on the notes. Therefore, the CDO analysis for the remarketed notes must assess both timely and full payment of interest due on each interest payment and maturity date. Any grace periods in payments on the long-term CDO notes must be mirrored in the terms of the remarketed notes and any supporting put agreement.

Principal Payments on Remarketed Notes

The payment dates on the remarketed notes will often coincide with the principal and interest payment dates on the long-term notes. CDO transactions typically have monthly, quarterly or semi-annual payment dates. Principal on remarketed notes are usually due and payable on the remarketing date. A grace period for payment of principal on remarketed notes is not typical as principal payments in a CDO are not scheduled payments but rather a pass-through of cash flows. However, if any grace period exists, then, similar to interest, it would be incorporated into the **Prime-1** rating analysis.

The Remarketing Process

The remarketed notes mature on a date no later than 397 days from their issuance date. This will most likely be prior to the final maturity date of the other tranches of the CDO. Therefore, the CDO transaction will periodically issue additional series of remarketed notes as the previously issued notes mature. The process by which new investors are identified is called the remarketing process and the time period that encompasses the remarketing process is called the remarketing period. The remarketing period will generally coincide with the payment dates of the CDO transaction; however, it will typically end a few days prior to the payment date. At the latest, the remarketing period ends the day prior to the payment date on remarketed notes. Sometimes short-term tranches have multiple remarketing periods between payment periods, but this is more common for CDO transactions with quarterly or semi-annual payment dates.

Role of the Remarketing Agent

The remarketing agent is typically the CP desk of a **Prime-1** rated financial institution. During the remarketing period, the remarketing agent will market the notes that will be issued on the next payment date to new and existing investors. The remarketing agent will work with the CDO manager to determine the terms of the notes to be issued (e.g. principal amount, maturity date, interest rate and interest reset dates, if any) and interest rate resets on outstanding remarketed notes (if applicable). The maturity date and interest reset dates of the notes will coincide with the payment dates on the CDO transaction.

At the end of each remarketing period, the remarketing agent will send a notice to the trustee stating whether (or not) there has been a successful remarketing of the maturing remarketed notes.

Successful Remarketing of Notes

A successful remarketing occurs if investors have been identified to purchase all of the remarketed notes to be issued on the next payment date at a spread not exceeding the maximum remarketing spread. In many respects, a successful remarketing can be best compared to "rolling" ABCP on a maturity date. The proceeds from the newly-issued remarketed notes are applied to the payment of the maturing remarketed notes.

If there has been a successful remarketing, the put option is not exercised.

Failed Remarketing Results in the Exercise of the Put Option

A failed remarketing occurs if an insufficient number of investors is identified to purchase the notes which will be issued on the next payment date. A failed remarketing may occur for a number of non-credit related reasons. For example, the short-term debt market may be experiencing a changing rate environment, whereby the spread offered on the remarketed notes is not attractive to investors. Alternatively, a decline in liquidity in the short-term market may reduce the potential investor pool or a market disruption could result in a failed remarketing, preventing the issuance of remarketed notes.

If a failed remarketing occurs, liquidity provisions within the transaction structure are invoked so that investors will be paid in full on the maturity date of the remarketed notes. A failed remarketing will result in an exercise of the put option. Pursuant to the put option, the put counterparty is required to purchase the remarketed notes that were subject to a failed remarketing or a failed settlement. The amount paid by the put counterparty for the purchase of these notes equals the face amount (i.e. principal plus accrued interest) of the maturing remarketed notes on such date.

For some short-term tranche structures, a failed remarketing results in an immediate exercise of the put. In other CDO structures, the put is not exercised until the second consecutive failed remarketing. In the latter case, investors would be forced to hold their investment in the remarketed notes at the maximum remarketing spread until the end of the second remarketing period. This is possible because the notes are issued for a one year maturity, but are remarketed every six months. A successful remarketing restores the one year maturity. A first failed remarketing leaves the notes with six more months to maturity, during which time a second remarketing can be attempted.

GRACE PERIODS FOR PAYMENTS UNDER THE PUT OPTION

The payment due by the put counterparty is usually payable on the maturity date of short-term notes. However, sometimes there is a grace period for this payment under the put option or the payment by the put counterparty is due after the stated maturity date of the short-term note.

Moody's **Prime-1** rating addresses the full and timely payment of principal and interest. The **Prime-1** rating assigned to the short-term notes is with respect to payment in full on the latest possible payment date, which includes all applicable grace periods under the CDO transaction and the put option. Moody's will typically consider existence of grace periods and their effect on ratings when evaluating the transaction and will provide disclosure in that case.

EVALUATION OF "OUTS TO FUNDING" UNDER THE PUT OPTION

The put counterparty's role in providing liquidity to the short-term notes is crucial to Moody's analysis of timely interest and principal payments on the short-term tranche. As mentioned above, the **Prime-1** rating on the short-term notes is highly dependent on the rating of the put counterparty. The *outs to funding* under the put agreement also need to be carefully analyzed to ascertain that the obligation to pay is also consistent with the **Prime-1** rating.

Most transactions have *outs to funding* whereby, upon the occurrence of certain events in the transaction (as described below), the put counterparty is not obligated to fund the interest and principal payments of the maturing short-term notes. The *outs to funding* on a transaction are listed in the put confirmation and differ from transaction to transaction.

The typical *outs to funding* that Moody's has seen across deals include, but are not limited to, the following:

- bankruptcy of the Issuer;
- non-payment of the put premium to the put counterparty for some consecutive number of payment dates;
- non-payment of interest and principal on the senior notes of the CDO, including non-payment on the short-term and junior **Aaa**-rated tranche;

- erosion of the OC ratio[10] of the **Aaa**-rated tranche below a specified level; and,
- cumulative credit-related losses in the underlying collateral exceeding a pre-specified amount.

Moody's long-term rating is based on an expected loss analysis and addresses the ultimate payment of interest and principal to the rated tranche. The **Prime-1** rating, on the other hand, is based on a default probability analysis (i.e. the analysis ignores recoveries) and addresses the timely payment of interest and principal on the short-term notes. There is a relationship between the long-term and short-term ratings since both of them include a probability component. The Prime ratings are equivalent to the investment-grade spectrum of Moody's long-term ratings. The **Prime-1** rating, for example, is generally equivalent to the **Aaa** to **A2** spectrum of corporate long-term ratings. For structured transactions, Moody's **Prime-1** rating falls within a long-term rating equivalent of **Aaa** to **Aa**.[11]

As indicated above, Moody's analyzes each of the *outs to funding* relevant to the CDO transaction and ascertains that the probability of each of these outs occurring is consistent with a **Prime-1** rating, or equivalently, to a long-term probability in the '**Aa**' range, lending stability to the **Prime-1** rating assigned. A brief discussion of the *outs to funding* listed above vis-à-vis their impact on the rating process is included below.

The inclusion of bankruptcy of the issuer as an *out to funding* does not have an impact on the **Prime-1** rating of the short-term notes since the SPV is organized as a bankruptcy-remote entity.

Liquidity-based *outs* such as non-payment of timely interest on the senior notes or non-payment of the put premium are common. The put premium is typically paid at the top of the waterfall, either pro-rata or junior to the **Aaa**-rated Notes and therefore has at least a **Aa**-likelihood of payment. Nonetheless, with the underlying collateral in recent SF CDO deals largely concentrated in residential assets, Moody's believes that an *out* resulting from a single occurrence of non-payment of interest on the senior notes or premium to the put counterparty could be problematic. Slight fluctuations or abrupt spikes in the interest rates could cause some of the underlying residential tranches to hit Available Funds Caps (AFC).[12] With residential asset concentrations as high as 90% in recent structured finance deals, Moody’s believes that the AFC risk poses a potential challenge, especially when combined with basis risk. Thus, Moody's believes that an *out to funding* should not be a single missed payment, but rather three consecutive missed payments (on a quarterly-pay deal) or nine consecutive missed payments (on a monthly-pay deal). Consecutive missed payments would ensure that the *out* is due to prolonged credit or liquidity issues as opposed to adverse market conditions that occur abruptly. In high-grade SF CDO transactions, for instance, a collateral pool with a 20% basket for single-A rated assets is more exposed to the AFC risk discussed above compared to one with only a 10% basket.

Typically, the mezzanine-**Aaa** OC Ratio, calculated without ratings-based and discount haircuts, is used to determine an *out to funding*. For most of the transactions analyzed to-date, Moody's has determined that a mezzanine-**Aaa** OC level of around 100%, which, since it is easily monitored, should provide sufficient warning to investors when the deal is deteriorating.[13] As part of its rating process, Moody's will assess the probability that the mezzanine-**Aaa** OC falls to or below 100% to check that it is consistent with a **Aa** likelihood of occurrence.

The put option is designed to provide liquidity and not necessarily credit support to the short-term notes. If a credit-related out is included in a specific transaction, such as cumulative losses in the underlying collateral exceeding a given amount, the put counterparty can walk away from its obligation to fund the short-term notes upon a significant credit deterioration of the underlying collateral. This threshold amount for cumulative losses is usually sized as a percentage of the aggregate par amount of all classes of notes issued by the CDO and the percentage varies from transaction to transaction depending on the credit risk characteristics of the underlying collateral pool. When this *out* is included, Moody's will test that the probability of the actual losses in the pool exceeding the threshold is consistent with a **Aa** rating level.

10 The Overcollateralization Ratio (OC) is defined as the ratio of the CDO's assets (including principal proceeds and eligible investments) to the CDO's liabilities. For instance, the mezzanine-**Aaa** OC Ratio is calculated as the ratio of the CDO's assets to the aggregate balance of the **Aaa**-rated liabilities only. In the context of the *outs* to the put, ratings-based and discount haircuts to the principal balance of the collateral assets are generally not applied for the calculation of the OC Ratio.

11 For more information on short-term ratings, refer to "The Fundamentals of Asset-Backed Commercial Paper", Moody's *Special Report*, February 2003.

12 See "Treatment of Available Funds Cap Risk in Cash and Synthetic Structured Finance CDOs", Moody's *Special Report*, December 2005.

13 A level of 100% in the mezzanine-**Aaa** OC Ratio means that the aggregate balance of the CDO's assets is equal to the aggregate balance of the **Aaa**-rated liabilities, i.e. ignoring the impact of any excess interest, losses in the collateral pool are such that there is generally not enough collateral to pay principal on any liabilities below the mezzanine-**Aaa** tranche.

MOODY'S OUTLOOK FOR SHORT-TERM TRANCHES ISSUED BY CDO'S

The market has experienced significant growth since the first short-term notes were issued by a CDO. Issuance tripled in 2003 from the previous year and has continued to grow consistently in subsequent years with issuance from high-grade SF CDOs dominating the market segment. Currently, there is about $55 billion outstanding in short-term notes issued by CDO transactions with approximately $21 billion issued during 2005 alone.

Many factors have helped sustain the growth of transactions with short-term tranches in the CDO market. First and foremost is the tightening credit spread environment that has forced arrangers to create CDO structures that offer more attractive returns to equity investors. In addition, the wide availability and good performance of structured finance assets (mostly residential mortgage-backed securities) compared to other asset classes has helped arrangers structure high-grade SF CDOs of significant sizes (multi-billion dollar transactions in some cases) whereby considerable leverage could be achieved. The leverage in these large transactions magnifies the impact on equity returns by reducing the cost of funding and thus makes the short-term notes an appealing alternative to fund CDOs.

Traditional CP investors have also shown an interest in this asset class due to the higher spreads that CDO short-term tranches have paid relative to the more traditional money-market investments and ABCP issued by multiseller and single-seller conduits.

The issuance was strong in 2005, exceeding that of the previous year by over 20%. During 2005, Moody's rated a little over $21 billion dollars of short-term notes issued by 16 transactions. In the previous year, the total volume rated was a little over $17 billion in 18 transactions. We expect that this growth will be maintained in 2006.

There is a clear trend toward fewer but larger transactions. From 2003 to 2004, the total volume rated by Moody's increased almost 50% from around $11.7 billion to approximately $17.3 billion but the number of new transactions remained constant at a record high of 18 transactions. In fact, some of the existing CDO transactions that issue short-term tranches have experienced such strong investor demand that arrangers and collateral managers have upsized recently closed transactions, in some cases more than doubling the initial issuance to create multi-billion-dollar structures.

GLOSSARY OF DEFINED TERMS

Structured Finance CDOs (SF CDOs): CDOs backed by structured asset classes such as commercial and residential mortgage-backed, credit-card, auto, student loan, and other CDO securitizations. SF CDOs backed primarily by collateral rated **A3** or higher are referred to as High-Grade SF CDOs and those backed primarily by collateral rated **Baa1** or lower are referred to as Mezzanine SF CDOs.

Discount Haircut: A haircut applied to the numerator of the OC ratio, which accounts for purchases of assets at a deep discount. This haircut serves as an indicator for potential credit deterioration due to the purchase of low-quality assets.[14]

Ratings-Based Haircut: A haircut applied to the numerator of the OC ratio, which accounts for excessive concentrations of lowly-rated assets.[15]

Overcollateralization Ratio (OC): This is a ratio of the CDO's assets (including any principal proceeds and eligible investments) to the CDO's liabilities. The par amount of the assets (numerator) is adjusted for any ratings-based and discount haircuts. Upon a failure of the OC test due to collateral deterioration, available proceeds are generally re-directed from the subordinate to the senior tranches until the tests are back in compliance.

Available Funds Cap (AFC): Feature by which the coupon on a liability of a mortgage securitization is capped by the net weighted-average coupon (WAC) of the underlying mortgage pool or the amount of funds available in the deal.

Prime-1: Moody's highest short-term rating. Issuers rated **Prime-1** have a superior ability to repay short-term debt obligations. Moody's short-term ratings are opinions of the ability of issuers to honor short-term financial obligations. Ratings may be assigned to issuers, short-term programs or to individual short-term instruments. Such obligations generally have an original maturity not exceeding thirteen months, unless explicitly noted.

ABCP: Senior secured, short-term notes backed by one or more pools of financial assets. ABCP can be issued on a discount or interest-bearing basis, but is most commonly issued on a discount basis. The maximum maturity tenor of ABCP is up to 397 days. For CDOs that issue ABCP, the maturity dates of the ABCP may or may not coincide with the payment dates of the long-term tranches of the CDO transaction.

Remarketed Notes: Short-term notes that may be issued on a discount or interest-bearing basis, but are most commonly issued on an interest-bearing basis. Prior to the maturity date of a tranche of remarketed notes, the remarketing agent will solicit new (or existing) investors to purchase the remarketed notes that will be issued on such maturity date. For CDOs that issue remarketed notes, the maturity dates of the remarketed notes coincide with the payment dates of the long-term tranches of the CDO transaction.

Grace Period: The period of time (generally one to five business days) following the due date of a required payment (which may be the maturity date of ABCP or remarketed notes), in which payment may still be made and not constitute a payment default under the terms of the transaction documents.

Multiseller conduits: These programs provide financing to a diversified pool of assets originated by more than one company. The liabilities issued by a multiseller program most commonly include asset-backed commercial paper, extendible commercial paper, callable commercial paper and subordinate notes.

Single-seller conduits: These programs provide financing for assets originated by only one company, or related to one company's business operations. The liabilities issued by a single-seller program may include asset-backed commercial paper, extendible commercial paper, callable commercial paper and subordinate notes.

14 See "Par Haircuts in Structured Finance CDOs", *Moody's CDO RatingFactors*, Vol II, No. 5, Jan. 2006.
15 See "Par Haircuts in Structured Finance CDOs", *Moody's CDO RatingFactors*, Vol II, No. 5, Jan. 2006.

APPENDIX

Table A1

Summary of Moody's Rated CDO Transactions Issuing Short-Term Tranches

Issuer	Short-Term Rating	Long-Term Rating	Closing Date	Legal Maturity	Short-Term Notes Balance	Entire CDO Issuance	Collateral Manager	Put Provider
PPM America High Grade CBO I, Ltd.	**Prime-1**		19-Dec-00	15-Jan-13	$ 300,000,000	$ 1,000,000,000	PPM America	AIG FP
Blue Heron Funding I Ltd.	**Prime-1**		18-Oct-01	18-Oct-41	$ 910,000,000	$ 1,000,000,000	WestLB	WestLB
Putnam Structured Product CDO 2001-1 Ltd.	**Prime-1**	**Aaa**	30-Nov-01	2/30/2032	$ 106,000,000	$ 300,000,000	Putnam	AIG FP
Blue Heron Funding II Ltd[1]	**Prime-1**		22-Mar-02	21-Mar-41	$ 910,000,000	$ 1,000,000,000	WestLB	WestLB
G-Star 2002-1 Ltd[2]	**Prime-1**	**Aaa**	25-Apr-02	25-Apr-17	$ 162,250,000	$ 311,950,000	GMAC	AIG FP
Blue Heron Funding III Ltd.[1]	**Prime-1**	**Aa1**	29-Oct-02	29-Oct-47	$ 910,000,000	$ 1,000,000,000	WestLB AM	WestLB
G-Star 2002-2, Ltd	**Prime-1**	**Aaa**	20-Nov-02	25-Oct-17	$ 220,000,000	$ 398,505,829	GMAC	AIG FP
Putnam Structured Product CDO 2002-1 Ltd.[3]	**Prime-1**	**Aaa**	20-Dec-02	10-Jan-38	$ 880,000,000	$ 1,000,000,000	Putnam	AIG FP
Blue Heron Funding IV Ltd.[4]	**Prime-1**	**Aaa**	20-Dec-02	20-Dec-47	$ 455,000,000	$ 500,000,000	WestLB AM	WestLB
Blue Heron Funding V Ltd.[5]	**Prime-1**	**Aaa**	21-Feb-03	22-Feb-06	$ 910,000,000	$ 1,000,000,000	WestLB AM	WestLB
NorthLake CDO I, Limited	**Prime-1**	**Aaa**	26-Feb-03	26-Mar-33	$ 174,000,000	$ 303,500,000	Deerfield	AIG FP
House of Europe Funding I Ltd.[6][1]	**Prime-1**		28-Mar-03	28-Aug-93	$ 1,038,010,000	$ 1,278,920,000	WestHyp-PMAS	WestLB
Blue Heron Funding VI, Ltd.[1]	**Prime-1**	**Aaa**	21-May-03	21-May-47	$ 1,138,750,000	$ 1,249,775,000	WestLB	WestLB
Putnam Structured Product CDO 2002-1 Ltd. (upsize)	**Prime-1**	**Aaa**	23-May-03	10-Jan-38	$ 880,000,000	$ 1,000,000,000	Putnam	AIG FP
Blue Heron Funding VII Ltd.[1]	**Prime-1**		30-May-03	27-May-05	$ 1,138,750,000	$ 1,249,775,000	WestLB	WestLB
Independence IV CDO, Ltd.	**Prime-1**		26-Jun-03	15-Jul-38	$ 240,000,000	$ 394,000,000	Declaration M&R	AIG FP
Grenadier Funding, Limited	**Prime-1**		14-Jul-03	05-Aug-38	$ 1,320,000,000	$ 1,500,000,000	ACA	Citibank
Bluegrass ABS CDO I, Ltd.	**Prime-1**		25-Jul-03	18-Aug-38	$ 250,000,000	$ 401,000,000	INVESCO	AIG FP
Grand Central CDO I Ltd.	**Prime-1**	**Aaa**	30-Jul-03	10-Sep-38	$ 182,500,000	$ 300,000,000	Vanderbilt	AIG FP
Newcastle CDO III, Limited	**Prime-1**	**Aaa**	09-Sep-03	24-Sep-38	$ 395,000,000	$ 500,000,000	Newcastle	AIG FP
Putnam Structured Product Funding 2003-1 Ltd	**Prime-1**	**Aaa**	08-Oct-03	15-Oct-38	$ 363,000,000	$ 561,000,000	Putnam	BoA
Davis Square Funding I, Ltd.	**Prime-1**	**Aaa**	08-Oct-03	16-Oct-38	$ 192,500,000	$ 1,000,000,000	TCW	AIG FP
TIAA Real Estate CDO 2003-1 Ltd.	**Prime-1**	**Aaa**	06-Nov-03	28-Dec-18	$ 222,000,000	$ 300,000,000	TIAA	AIG FP
Orchid Structured Finance CDO, Ltd.	**Prime-1**	**Aaa**	02-Dec-03	18-Nov-38	$ 175,000,000	$ 250,000,000	ST AM	AIG FP
Lakeside Funding LLC	**Prime-1**		11-Dec-03	07-Dec-38	$ 624,000,000	$ 624,000,000	Vanderbilt	AIG FP
Commodore CDO II LTD.	**Prime-1**	**Aaa**	12-Dec-03	12-Dec-38	$ 186,000,000	$ 300,000,000	FFT&W	AIG FP
Blue Bell Funding, Ltd.	**Prime-1**		05-Dec-03	03-Dec-38	$ 1,112,500,000	$ 1,250,000,000	GMAC	Citibank
Descartes CDO Limited	**Prime-1**	**Aaa**	17-Dec-03	15-Dec-38	$ 1,199,400,000	$ 2,000,000,000	South Street	DB
Millstone Funding, Ltd.	**Prime-1**	**Aaa**	05-Feb-04	04-Mar-39	$ 880,000,000	$ 1,000,000,000	Church Tavern	Citibank
Blue Heron Funding IX Ltd.	**Prime-1**		25-Feb-04	23-Feb-41	$ 910,000,000	$ 1,000,000,000	WestLB	WestLB
Bluegrass ABS CDO II Ltd.	**Prime-1**	**Aaa**	13-Apr-04	12-Apr-39	$ 248,000,000	$ 414,000,000	INVESCO	AIG FP
Saturn Ventures II, Limited	**Prime-1**		22-Apr-04	22-Apr-39	$ 289,000,000	$ 410,000,000	Church Tavern	Citibank
Klio Funding, Ltd.[7]	**Prime-1**		23-Apr-04	23-Apr-39	$ 2,059,900,000	$ 2,423,240,000	BSAM	Citibank
Davis Square Funding II, Ltd.	**Prime-1**		06-May-04	06-May-39	$ 548,000,000	$ 1,200,000,000	TCW	Wachovia
Sierra Madre Funding, Ltd.	**Prime-1**		29-Jul-04	07-Aug-39	$ 945,000,000	$ 1,500,000,000	WAMCO	SocGen
Whitehawk CDO Funding, LTD.	**Prime-1**	**Aaa/Aa2**	12-Aug-04	15-Dec-39	$ 870,000,000	$ 1,000,000,000	WestLB	Wachovia
Laguna ABS CDO, Ltd.	**Prime-1**	**Aaa**	28-Oct-04	03-Nov-44	$ 632,400,000	$ 1,250,000,000	PIMCO	SocGen
Klio II Funding, Ltd.[8]	**Prime-1**		29-Oct-04	29-Oct-39	$ 1,800,000,000	$ 2,019,500,000	BSAM	Citibank
Pinnacle Point Funding Ltd.	**Prime-1**		04-Nov-04	07-Nov-39	$ 880,000,000	$ 1,005,000,000	State Street	Citibank
Cheyne High Grade ABS CDO, Ltd.	**Prime-1**		10-Nov-04	10-Nov-39	$ 485,000,000	$ 1,000,000,000	Cheyne	Wachovia
McKinley Funding, Ltd.	**Prime-1**		10-Dec-04	05-Jun-40	$ 870,000,000	$ 1,009,500,000	Vertical Capital	Citibank
Cimarron CDO Ltd.	**Prime-1**		15-Dec-04	05-Mar-40	$ 880,000,000	$ 1,000,000,000	AIG GI	JP Morgan
Davis Square Funding III, Ltd.	**Prime-1**	**Aaa**	21-Oct-04	08-Nov-39	$ 1,000,000,000	$ 1,502,000,000	TCW	Calyon
Belle Haven ABS CDO, Ltd.	**Prime-1**		14-Dec-04	03-Nov-44	$ 516,000,000	$ 1,000,000,000	NIBC	SocGen
Zenith Funding, Ltd.	**Prime-1**		15-Dec-04	06-Dec-39	$ 1,346,000,000	$ 1,511,000,000	ACA	Citibank
Quatro-PMX Funding, Ltd.	**Prime-1**		27-Dec-04	27-Dec-39	$ 2,135,000,000	$ 2,369,500,000	Paramax	Citibank

Table A1 (Continued)

Summary of Moody's Rated CDO Transactions Issuing Short-Term Tranches

Issuer	Short-Term Rating	Long-Term Rating	Closing Date	Legal Maturity	Short-Term Notes Balance	Entire CDO Issuance	Collateral Manager	Put Provider
Duke Funding High Grade I, Ltd.	**Prime-1**		27-Jan-05	27-Jan-45	$ 1,540,000,000	$ 2,500,000,000	Duke	AIG FP
Davis Square Funding IV, Ltd.	**Prime-1**	**Aaa**	06-Apr-05	09-Apr-40	$ 950,000,000	$ 1,500,000,000	TCW	SocGen
Kent Funding, Ltd.	**Prime-1**		06-Apr-05	06-Apr-40	$ 900,000,000	$ 1,009,800,000	Declaration M&R	Citibank
Newcastle CDO VI Limited	**Prime-1**	**Aaa**	19-Apr-05	24-Apr-40	$ 323,000,000	$ 500,000,000	Newcastle	BoA
Klio II Funding, Ltd. (upsize)	**Prime-1**		27-Apr-05	29-Oct-39	$ 2,700,000,000	$ 3,029,300,000	BSAM	Citibank
Adirondack 2005-1 Ltd.	**Prime-1**	**Aaa**	11-May-05	08-Jul-40	$ 1,070,100,000	$ 1,525,000,000	Clinton Group	SocGen
Athos Funding, Ltd.	**Prime-1**		16-May-05	06-Jun-43	$ 900,000,000	$ 1,004,100,000	Terwin	Citibank
Buckingham CDO LTD.(9)	**Prime-1**		28-Jul-05	02-Aug-40	$ 900,000,000	$ 1,000,000,000	Deerfield	Barclays
McKinley II Funding, Ltd.	**Prime-1**		18-Aug-05	06-Feb-45	$ 863,000,000	$ 1,011,600,000	Vertical Capital	Citibank
Altius Funding I Ltd.	**Prime-1**	**Aaa**	24-Aug-05	08-Dec-40	$ 1,416,000,000	$ 2,006,000,000	Aladdin	SocGen
Davis Square Funding V, Ltd.	**Prime-1**		30-Sep-05	08-Oct-40	$ 1,740,000,000	$ 2,018,000,000	TCW	Calyon
G Street Finance Ltd.	**Prime-1**	**Aaa**	20-Oct-05	09-Jan-41	$ 1,064,000,000	$ 1,500,900,000	Wharton	SocGen
Klio III Funding, Ltd.	**Prime-1**		01-Nov-05	01-Nov-40	$ 3,600,000,000	$ 4,030,000,000	BSAM	Citibank
Adirondack 2005-2 Ltd.	**Prime-1**	**Aaa**	14-Nov-05	14-Feb-41	$ 1,087,680,000	$ 1,550,000,000	Clinton	SocGen
Raffles Place Funding, Ltd.	**Prime-1**		16-Nov-05	16-Nov-40	$ 880,000,000	$ 1,005,000,000	UOB	Citibank
Buckingham CDO II Ltd.	**Prime-1**		01-Dec-05	4/05/2041	$ 1,170,000,000	$ 1,300,000,000	Deerfield	Barclays

Notes:

(1) Due to the removal of the guarantee to WestLB in July 2005, the capital structure was modified in 2005 to issue only long-term notes.
(2) **Prime-1** rating supported by a Cashflow Swap with AIG.
(3) Original CDO was upsized in May 29, 2003 (CP Notes upsized from $880 million to $1.76 billion).
(4) Equity issued in Euros (€41,544,500) but total CDO issuance converted to U.S. Dollars for this table.
(5) CDO issued 2 classes of short-term notes.
(6) CDO liabilities issued in Euros (€915 million of Prime-1 Notes and €80 million of equity).
(7) Original CDO was upsized within the year (CP Notes upsized from $1.074 billion to $2.059 billion).
(8) Original CDO was upsized in April 27, 2005 (CP Notes upsized from $2.7 billion to $4.5 billion).
(9) This transaction does not have a put option, instead Barclays acts as Liquidity Provider.

Table A2

Summary of Put Provider Concentration in CDO Transactions Issuing Short-Term Tranches

Put Provider	Number of CDOs	CP Issuance
Citibank N.A.	15	$ 22,535,400,000
WestLB	9	$ 8,320,510,000
Société Générale	8	$ 7,681,180,000
AIG Financial Products Corp.	17	$ 6,977,250,000
Calyon	2	$ 2,740,000,000
Barclays Bank PLC	2	$ 2,070,000,000
Wachovia Bank N.A.	3	$ 1,903,000,000
Deutsche Bank	1	$ 1,199,400,000
JP Morgan Chase Bank	1	$ 880,000,000
Bank of America N.A.	2	$ 686,000,000
Grand Total	**60**	**$ 54,992,740,000**

Table A3

Summary of Collateral Manager Concentration in CDO Transactions Issuing Short-Term Tranches

Collateral Manager	No. of Deals	Total CP Notes
Bear Stearns Asset Management	3	$ 10,159,900,000
WestLB New York Branch	9	$ 8,152,500,000
TCW Asset Management Company	5	$ 4,430,500,000
ACA Management, LLC	2	$ 2,666,000,000
Deerfield Capital Management LLC	3	$ 2,244,000,000
The Putnam Advisory Company LLC	3	$ 2,229,000,000
Clinton Group, Inc.	2	$ 2,157,780,000
Paramax Capital Markets, LLC	1	$ 2,135,000,000
Vertical Capital LLC	2	$ 1,733,000,000
Duke Funding Management LLC	1	$ 1,540,000,000
GMAC Institutional Advisors LLC	3	$ 1,494,750,000
Aladdin Capital Management, LLC.	1	$ 1,416,000,000
South Street Global Advisors	1	$ 1,199,400,000
Church Tavern Advisors, LLC	2	$ 1,169,000,000
Declaration Management & Research LLC	2	$ 1,140,000,000
Wharton Asset Management Bermuda Limited	1	$ 1,064,000,000
WestHyp-PMAS	1	$ 1,038,010,000
Western Asset Management Company	1	$ 945,000,000
Terwin Money Management LLC	1	$ 900,000,000
UOB Asset Management Limited	1	$ 880,000,000
State Street Research & Management Company	1	$ 880,000,000
AIG Global Investment Corp.	1	$ 880,000,000
Vanderbilt Capital Advisors	2	$ 806,500,000
Newcastle Investment Corp.	2	$ 718,000,000
Pacific Investment Management Company LLC	1	$ 632,400,000
NIBC Credit Management Inc.	1	$ 516,000,000
INVESCO	2	$ 498,000,000
Cheyne Capital Management Limited	1	$ 485,000,000
PPM America Inc.	1	$ 300,000,000
TIAA Advisory Services, LLC	1	$ 222,000,000
Fischer Francis Trees & Watts	1	$ 186,000,000
ST Asset Management Pte Ltd	1	$ 175,000,000
Grand Total	**60**	**$ 54,992,740,000**

Doc ID# SF67817