

**Examination Report for  
Moody's Investor Services, Inc.  
("Moody's")**

**1. Introduction**

On August 31, 2007, the Staff in the Commission's Office of Compliance Inspections and Examinations ("OCIE"), Division of Trading and Markets ("Trading & Markets") and Office of Economic Analysis ("OEA") (collectively "the Staff") initiated an examination of Moody's, and two other credit rating agencies. The focus of the examinations was Moody's activities in rating subprime residential mortgage-backed securities ("RMBS") and collateralized debt obligations ("CDOs") linked to subprime RMBS.<sup>1</sup> Specifically, key areas of review included:

- the NRSROs' ratings policies, procedures, and practices, including gaining an understanding of ratings models, assumptions, criteria and protocols;
- the adequacy of the disclosure of the ratings process and methodologies used by the NRSROs;
- whether the NRSROs complied with their ratings policies and procedures for initial ratings and ongoing surveillance;
- the efficacy of the NRSROs' conflict of interest procedures; and
- whether ratings were unduly influenced by conflicts of interest related to the NRSROs' role in bringing issues to market and the compensation they receive from issuers and underwriters.

The examinations also included a review of whether there were any errors in ratings issued as a result of flaws in ratings models used as a result of a press report indicating errors in one firm's model.<sup>2</sup> Initial observations as a result of this aspect of the examinations are included in this report.

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<sup>1</sup> Beginning in 2007, delinquency and foreclosure rates for subprime mortgage loans in the United States dramatically increased, creating turmoil in the markets for RMBS backed by such loans and CDOs linked to such loans. As the performance of these securities continued to deteriorate, the three NRSROs most active in rating these instruments downgraded a significant number of their ratings. The NRSROs' performance in rating these structured finance products raised questions about the accuracy of their credit ratings generally as well as the integrity of the ratings process as a whole.

<sup>2</sup> See Sam Jones, Gillian Tett, and Paul J. Davies, *Moody's Error Gave Top Ratings to Debt Products*, Financial Times, May 20, 2008, at 1.

The examination review period generally covered January 2004 through the present. The firms under examination became subject to the provisions of the Credit Rating Agency Reform Act of 2006 (the “Rating Agency Act”), which amended the Securities Exchange Act of 1934 (“Exchange Act”), and the Commission’s rules when they registered with the Commission as NRSROs in September 2007. Although Moody’s was not subject to legal obligations applicable to NRSRO during most of the review period, the Staff nonetheless sought to make relevant factual findings and observations with respect to the activities of Moody’s in rating subprime RMBS and CDOs during the period, as well as to identify possible areas for improvement in their practices going forward.

Over 50 Commission Staff participated in the examinations of Moody’s, and two other credit rating agencies. The examinations included extensive on-site interviews with the rating agencies’ staff, including senior and mid-level managers, initial ratings analysts and surveillance analysts, internal compliance personnel and auditors, personnel responsible for building, maintaining and upgrading the ratings models and methods used in the ratings process, and other relevant rating agency staff.

In addition, the Staff reviewed a large quantity of the rating agencies’ internal records, including the written policies, procedures and other such documents related to initial ratings, the ongoing surveillance of ratings, and the management of conflicts of interest, and the public disclosures of the procedures and methodologies for determining credit ratings. The Staff also reviewed deal files for subprime RMBS and CDO ratings, internal audit reports and records, and other internal records, including a large quantity of email communications records (the rating agencies’ produced over two million emails and instant messages that were sorted, analyzed and reviewed using software filtering tools). Finally, the Staff reviewed the rating agencies’ public disclosures, filings with the Commission and other public documents.

## **2. The Ratings Process**

The Rating Agency Act expressly states that the Commission has no authority to regulate the “the substance of the credit ratings or the procedures and methodologies” by which any NRSRO determines credit ratings.<sup>3</sup> As part of this examination, however, the Staff necessarily sought to develop an understanding of the quantitative analysis used to rate the RMBS and CDOs that have been subject to such dramatic and widespread change.

Moody’s rates RMBS and CDO transactions by first assessing the underlying collateral and then assessing the deal structure. For RMBS collateral assessment, Moody’s uses the Moody’s Mortgage Metrics Model (“M3”) to quantitatively arrive at initial loss coverage numbers.<sup>4</sup> Moody’s then looks at qualitative factors, such as the originator and servicer,

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<sup>3</sup> 15 U.S.C. 78o-7(c)(2).

<sup>4</sup> Presently, Moody’s evaluates over 50 different characteristics of each loan in a pool, through its M3 model, examples of which are: credit bureau scores, which is an indicator of a borrower’s past credit performance; loan-to-value ratio, which reflects the amount of equity borrowers have in

and makes adjustments to the initial loss coverage numbers to arrive at the final loss coverage numbers.<sup>5</sup> For CDOs, Moody's uses its proprietary CDOROM model for projecting expected loss. For cash flow CDOs, the results of the CDOROM model runs are processed by Moody's proprietary CDOEdge model in order to assess the portfolio.<sup>6</sup> In this second stage, Moody's arrives at an estimate of credit enhancement for excess spread through models which project cash flows for the proposed capital structure. Results from the collateral and cash flow models are reviewed through the rating committee approval process before a final rating is issued.

M3 was not available to rate subprime securities until December 2006. Prior to that date, Moody's used a system of "benchmarking" to rate subprime RMBS wherein a subprime mortgage pool currently being evaluated was compared to several subprime pools previously rated by Moody's.<sup>7</sup> This process resulted in an initial rating number after which several "hits" or adjustments could be applied, depending on the pools characteristics, to arrive at the final loss coverage numbers.<sup>8</sup>

As part of the ratings process during this period, Moody's will on occasion revise its ratings methodology. Many of the changes Moody's made were incremental and did not affect the overall rating. Moody's transitioned incremental changes over a short period of time. If a deal was in-house and had been priced, the old methodology would apply, and the deal would be rated under the former methodology. When a change to the methodology would affect a rating, Moody's generally published a Request for Comment notifying the market of the potential change and indicating that it would implement the change at a later date.

### **3. Increase in Number and Complexity of RMBS and CDO Deals**

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their homes; how fully buyers have documented their income and assets; whether the property will be owner occupied; and, whether the loan is for purchase or refinance.

<sup>5</sup> Moody's review of the originator, servicer, and master servicer is a significant element of Moody's rating process as each can greatly influence loss levels depending on their relative strength or weakness. The originator or servicer can increase or decrease loss levels separately by up to a total of 20%.

<sup>6</sup> For synthetic CDOs, Moody's analysts employ the CDOROM model, a simulation tool designed to determine the expected loss for each tranche. The CDOROM model runs a minimum of one million Monte Carlo simulations using the potential asset pools allowed under a CDO's covenants. For cash CDOs, the CDOROM model is generally employed to generate expected loss figures for potential collateral pools, which are then run through the firm's CDOEdge model, which applies a correlated binomial method (incorporating default correlation assumptions) to a proposed deal structure in order to generate projected payment waterfalls, in order to generate cash flow models for various scenarios.

<sup>7</sup> The subprime pools had either the same originator or a comparable originator.

<sup>8</sup> For example, if a bucket in a pool had a high percentage of interest only loans a hit would be applied to the expected loss number for that bucket.

From 2002 to 2006, the volume of structured finance deals rated by Moody's increased substantially, as did the revenues Moody's received from rating those deals. The structured products Moody's was asked to evaluate became increasingly complex, with many employing derivatives such as credit default swaps to replicate the performance of mortgage backed securities. Further, the loans made to retail borrowers being securitized evolved from 30-year fixed rate instruments to newer products such as second lien and adjustable rate mortgages. The increasing number and complexity of deals may have compromised various aspects of Moody's ratings operations for structured finance, as discussed in greater detail below.

#### **a. Revenue, Deal, and Staffing Levels**

From 2002 to 2006 the volume of RMBS deals rated by Moody's increased by 137%, and the number of CDO deals rated by Moody's increased by 700%. Correspondingly, the revenue Moody's derived from RMBS deals increased from \$61.8 million in 2002 to \$168.9 million in 2006 and CDO revenue increased from \$11.7 million in 2003<sup>9</sup> to \$91.2 million in 2006.

For the RMBS group, contemporaneous staffing increases appear roughly in line with volume increases (Moody's increased RMBS staff by 114% as volume increased by 137%).<sup>10</sup> For CDOs, however, Moody's staffing increases do not appear to have kept pace with volume increases (Moody's increased CDO staff by 24% as volume increased by 700%).<sup>11</sup>

#### **b. Impact on the Ratings Process**

The Staff believes that the deal and staffing levels during the review period may have impacted various aspects of the ratings process. For instance, several CDO memoranda reviewed by the Staff indicate that ratings were issued notwithstanding one or more unresolved issues. For example, the rating committee memorandum for the Costa Bella CDO, Ltd. deal stated that for one issue involving the collateral manager, "We didn't ha [sic] time to discuss this in detail at the committee, so they dropped the issue for this deal due to timing. We will need to revisit in the future."<sup>12</sup> Another potentially unresolved issue was described as "poorly addressed – needs to be checked in the next deal"<sup>13</sup> and "WARR- don't ask ☺"<sup>14</sup>.

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<sup>9</sup> Moody's was unable to produce CDO revenue for 2002 due to a transition of accounting systems.

<sup>10</sup> In 2002 RMBS lead analysts were responsible for monitoring their rated transactions. See MIS-OCIE-RMBS-28799. The tabulation of Moody's RMBS personnel for 2002 does not include the Group Managing Director or Senior Managing Director and the tabulation for 2006 does not include the Group Managing Director.

<sup>11</sup> In 2002, CDO lead analysts were responsible for monitoring their rated transactions. Senior Associates, of which there were nine, provided monitoring support.

<sup>12</sup> See MIS-OCIE-RMBS-26801.

<sup>13</sup> Id.

The Staff believes that the increase in the number and complexity of deals may have impacted Moody's subprime RMBS and CDO ratings operations, as is discussed in more detail below.

*The Staff recommends that Moody's periodically evaluate if it has sufficient staff and resources to manage its volume of business and meet its obligations under the Rating Agency Act.*

**Moody's Response:** Moody's agrees with the Staff's recommendation and will periodically evaluate staffing levels.

#### **4. Disclosure of the Rating Process**

The requirements of the Rating Agency Act specifically address the importance of disclosure. An NRSRO is required to disclose publicly the procedures and methodologies it uses in determining credit ratings.<sup>15</sup> Form NRSRO requires that this disclosure be a general description; but sufficiently detailed to provide users of credit ratings with an understanding of the processes employed in determining credit ratings, including among other things, the quantitative and qualitative models and metrics used to determine credit ratings. Moody's explained to the Staff that, prior to being registered as an NRSRO, it disclosed its ratings process during the review period. It appears, however, that certain significant aspects of the rating processes and the methodologies used to rate RMBS and CDOs were not always disclosed, or were not fully disclosed, as summarized below.

New or revised rating methodologies and policies that are deemed material are often first approved internally and then published as a Request for Comment from the market before being implemented.<sup>16</sup> In the RMBS group incremental changes to the ratings methodology or process are approved through RMBS chair meetings. Moody's states that it uses press releases and web postings to publicly disclose modifications to its rating methodologies and related practices, procedures and processes.<sup>17</sup> However, Moody's does not consolidate its methodologies for rating subprime RMBS or CDO transactions in one location.

As such, the Staff had difficulty locating the disclosure of certain aspects of Moody's ratings process. Moreover, Moody's does not publish (or publish before implementation) all incremental changes to its methodology. For example, the Staff found emails where

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<sup>14</sup> "WARR" stands for weighted average rate of return. See MIS-OCIE-RMBS-26798.

<sup>15</sup> Section 4(a)(1)(B)(ii) of the Exchange Act.

<sup>16</sup> Moody's Report on the Code of Professional Conduct, April 2006.

<sup>17</sup> Moody's Code of Professional Conduct, June 2005.

Moody's made changes to assumptions before the market was notified of the changes.<sup>18</sup> Additionally, the Staff found emails evidencing Moody's analysts utilizing an unpublished model to assess data.<sup>19</sup>

*The Staff recommends that Moody's conduct a review of its current disclosures of its processes and methodologies for rating RMBS and CDOs to assess whether it is fully disclosing its ratings methodologies and meeting the requirements of the Rating Agency Act and Form NRSRO. Further, the Staff recommends that Moody's review whether its policies governing the timing of disclosure of a significant change to a process or methodology are reasonably designed to comply with these requirements.*

**Moody's Response:** Moody's generally agrees with the Staff's recommendations and is currently taking steps to improve disclosure of the ratings process, including the drafting of unified methodologies.

## 5. Written Policies and Procedures for Rating RMBS and CDOs

As of September 2007, NRSROs are subject to a requirement to make and retain certain internal documents relating to its business, including procedures and methodologies used to determine credit ratings.<sup>20</sup> Prior to this, Moody's ratings policies are described in its Code of Professional Conduct, Report on the Code of Professional Conduct, Analyst Handbook – Rating Practices and Procedures, and Moody's Best Practices for the Conduct of Moody's Structured Finance Rating Committees. While these documents, taken as a whole, provide a general guideline for an analyst to follow when rating structured finance products, they were not specific to any type of structured finance product, such as RMBS or CDOs.

*The Staff recommends that Moody's conduct a review to determine whether its written policies and procedures used to determine credit ratings for RMBS and CDOs are fully documented in accordance with the requirements of Commission Rule 17g-2.*

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<sup>18</sup> Email chain ending with email from Ariel Weil, Associate Vice President/Analyst, Term RMBS, Moody's, to Kelly Slicklein, Associate Director, Investor Services Group, Moody's (Nov. 29, 2007, 20:08 GMT). See also email chain ending with email from Yuri Yoshizawa, Group Managing Director, US Derivatives, Moody's, to Yvonne Fu, Team Managing Director, US Derivatives, Moody's (Apr. 24, 2007, 18:50 GMT). See also email from Ariel Weil, Associate Vice President/Analyst, Term RMBS, Moody's, to Mark DiRienz, Team Managing Director, Term ABS, Moody's (Feb. 7, 2007, 20:54 GMT). See also email from Karen Ramallo, Associate Analyst, Term RMBS, Moody's, to Odile Grisard Boucher, Associate Analyst, Term RMBS, Moody's (Nov. 15, 2006, 19:10 GMT).

<sup>19</sup> Email chain ending with email from Karen Ramallo-Rodriguez, Associate Analyst, Term RMBS, Moody's, to Denise Person, Vice President/Senior Criteria Officer, Term RMBS, Moody's (Sept. 24, 2007, 18:26 GMT). Moody's states that it does not publish all criteria changes, particularly those they consider incremental or non-material.

<sup>20</sup> Rule 17g-2 under The Exchange Act. 17 CFR 240.17g-2.

**Moody's Response:** Moody's generally agrees with the Staff's recommendation and will conduct a review to ensure that its policies and procedures are properly documented in accordance with the Commission's rules.

As a result of a May 20, 2008, Financial Times article detailing a coding error in the model Moody's utilized to rate constant proportion debt obligations ("CPDOs")<sup>21</sup> the Staff expanded the scope of its exam to review Moody's policies and procedures for addressing the discovery of errors in its models and methodologies.<sup>22</sup> The Staff found that while Moody's does have policies and procedures that emphasize the importance of providing accurate ratings with integrity, it does not have policies and procedures that provide guidance on the process that should be followed when errors are discovered in its models, methodologies, or other aspects of the ratings process.

*The Staff recommends that Moody's develop policies and procedures to address the detection of errors with its models, methodologies, or other aspects of the ratings process. The Staff also recommends that Moody's develop policies and procedures for the reporting of discovered errors in its models, methodologies, or other aspects of the ratings process.*

**Moody's Response:** Moody's responded that it has instituted numerous remedial measures to address this issue, including implementing new policies and procedures, and establishing a taskforce to initiate a thorough review of all existing structured finance models.

## **6. Integrity and Accuracy of the Information Provided to Moody's**

There is no requirement under the federal securities laws that an NRSRO verify the information contained in RMBS loan portfolios presented to it for rating. Additionally, NRSROs are not required to insist that issuers perform due diligence, and they are not required to obtain reports concerning the level of due diligence performed by issuers.

The Staff notes that pursuant to its policies, procedures, and public pronouncements, Moody's did not engage in any due diligence or otherwise seek to verify the accuracy and quality of the loan data underlying the RMBS pools it rated during the review period. In fact, the Code of Ethics for Moody's clearly states that Moody's is under no obligation to perform, and does not perform, due diligence.<sup>23</sup> Moreover, it states that the assignment of a rating is not a guarantee of the accuracy, completeness, or timeliness of the

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<sup>21</sup> CPDOs are a type of credit derivative sold to investors looking for long term exposure to credit risk on a highly rated note. Investors buy notes issued by a special purpose vehicle ("SPV").

<sup>22</sup> The Staff also noted potential conflicts of interest with respect to this issue. These are addressed more fully below.

<sup>23</sup> See Moody's Code of Conduct, p 7, dated June 2005 and updated October 2007 (stating Moody's has no obligation to perform, and does not perform, due diligence with respect to the accuracy of the information it receives or obtains in connection with the rating process).

information relied on in connection with the rating.<sup>24</sup> Moody's solely performed loss and cash flow analyses on the data presented to it. Moody's generally did not verify the integrity and accuracy of such information as, in Moody's view, due diligence duties belonged to the other parties in the process. Moody's also did not seek representations from sponsors that due diligence was performed.

Moody's has taken, or announced, measures designed to improve the integrity and accuracy of the loan data they receive on underlying RMBS pools:

- Moody's announced that it was considering enhancements to its RMBS securitizations that would include the engagement by issuers of independent third parties to randomly sample, for due diligence, the greater of 10% or 200 loans for all subprime transactions.
- In addition, in an agreement with the New York State Attorney General, Moody's agreed to develop and publicly disclose due diligence criteria to be performed by underwriters on all mortgages comprising RMBS, and to review those results prior to issuing ratings.<sup>25</sup>

## **7. Documentation of Significant Steps and Participants in the Rating Process**

### **a. Documentation of Significant Steps in the Ratings Process**

An NRSRO is required to retain internal records, including non-public information and workpapers, used to form the basis of a credit rating it issued (Exchange Act Rule 17g-2(b)(2)). Prior to implementation of this requirement, Moody's policy was to retain records related to the credit analysis and rating process for certain time periods as identified in its record retention schedule.<sup>26</sup>

The Staff reviewed 50 RMBS and 51 CDO deals to determine if Moody's followed the policies and procedures for rating RMBS and CDOs and its file maintenance and recordkeeping policy. Moody's policies and procedures call for a rating committee memorandum and addendum to be produced for each transaction rated by Moody's. The information required in the rating committee memorandum and addendum includes the date the rating committee convened; the names of the rating committee attendees; the name of the committee chair; the type of rating action and type of instrument under consideration; the rating recommendation and rationale; the rating committee outcome and vote tally; quantitative analysis, and supporting materials.<sup>27</sup>

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<sup>24</sup> Id.

<sup>25</sup> [http://www.oag.state.ny.us/press/2008/june/june5a\\_08.html](http://www.oag.state.ny.us/press/2008/june/june5a_08.html)

<sup>26</sup> Moody's record retention policy did not apply to procedural or methodological policies governing the credit ratings process as a whole. MIS-OCIE-RMBS-28424-28483.

<sup>27</sup> See Moody's Best Practices for the Conduct of Moody's Structured Finance Rating Committees, at 5 (May 2006). See MIS-OCIE-RMBS-312, 397, 430. In May of 2006 Moody's added the



For RMBS transactions, most of the ratings memoranda and addenda contained the minimum required information under Moody's policy. However, the Staff found that the level of detail provided as to how the committee arrived at its rating levels was inconsistent.<sup>28</sup> Often boxes on the addendum were checked without explanation despite fields requiring explanation, contained an inadequate explanation, or in some cases were not checked at all.<sup>29</sup>

The level of documentation of Moody's CDO ratings process varied widely across the deals reviewed by the Staff. Only 15 included all of the four basic required pieces of documentation: a rating committee memorandum, a rating committee addendum, a monitoring committee memorandum, and a monitoring committee addendum. For 16 of the deals reviewed, no monitoring documentation was produced.<sup>30</sup> Additionally, the rating committee memoranda featured significant variation in the topics covered and amount of information presented. For instance, over half of the rating committee memoranda included a section on the collateral manager, however, the level of detail provided in this section varied greatly.<sup>31</sup> Almost all of the rating committee memoranda included a modeling assumptions section, however, the level of detail provided varied greatly. While a small number of memoranda had detailed discussions of the collateral manager, the majority of memoranda including this section either contained a very brief summary or essentially included the section only as a placeholder (i.e., the section included the name of the collateral manager followed by blank fields for items such as "location," "contact," "key personnel," etc.). The majority of the ratings committee memoranda also included an "Issues" section. The level of detail in this section also varied greatly, ranging from detailed listings of rating committee concerns and issuer/underwriter responses to short lists without any indication of resolutions. To the extent that they were provided to the Staff, the surveillance and monitoring memoranda,

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requirement that the committee chair be identified in all memoranda as well as the committee outcome. Compare MIS-OCIE-RMBS-312, with MIS-OCIE-RMBS-397, and 430.

<sup>28</sup> For instance, one initial rating committee memorandum contained only three sentences that merely state a base description of the loan pool and there is no way to discern how the rating committee arrived at its results, GSAMP 2006-S1, MIS-OCIE-RMBS-28730; others did not discuss the rating rationale in sufficient detail. See e.g. Long Beach Mortgage Loan Trust 2006-2, MIS-OCIE-RMBS-28621-28625.

<sup>29</sup> For example, the "Key variable(s) voted upon" sections of the addenda were often left blank or contained a generic term like "ratings."

<sup>30</sup> These numbers are based on the Staff's review of the documentation provided by Moody's. Approximately three months after the delivery of the majority of the requested transaction materials, Moody's provided an index that confirmed the Staff's findings as to the extent of documentation. See MIS-OCIE-RMBS-32168-32171.

<sup>31</sup> While a small number of memoranda had detailed discussions of the collateral manager, the majority of memoranda including this section either contained a very brief summary or essentially included the section only as a placeholder (i.e., the section included the name of the collateral manager followed by blank fields for items such as "location," "contact," "key personnel," etc.).

like the rating committee memoranda, also varied in the amount of information provided, with sections of some memoranda essentially serving as placeholders. Finally, many of the rating committee or monitoring memoranda did not contain a narrative discussing the ratings committee decision or underlying rationale.<sup>32</sup>

The Staff's findings with respect to deal files it reviewed are corroborated by other internal discussion by Moody's. For example, the Derivatives Group was aware that "delinquencies on adherence to the document retention policy had increased" and sent out an email to the Derivatives Group noting this issue.<sup>33</sup> Moody's, however, has subsequently stated that it is in the process of implementing automated committee memorandum and other document retention procedures which will address these issues.

Ultimately, the Staff found that Moody's failed to retain or document certain significant steps in the rating process, which made it difficult for the Staff to assess compliance with its rating policies and procedures, and to identify the factors that were considered in developing a particular rating. This lack of documentation would similarly make it difficult for the Moody's internal compliance staff or internal audit staff to assess compliance with the firm's policies and procedures.

#### **b. Documentation of Participants in the Ratings Process**

An NRSRO is also required to make and retain records of the identity of any credit analyst that participated in determining the rating and any person that approved the rating before it was issued (Exchange Act Rule 17g-2). This requirement is intended to assist the Commission in monitoring whether the NRSRO is following its procedures and methodologies for determining credit ratings and whether the NRSRO is complying with procedures designed to prevent the misuse of material nonpublic information by identifying the persons with the best information as to how the credit rating was determined. Prior to this, Moody's policy required that the rating committee attendees and rating rationale be a part of the rating committee memorandum.<sup>34</sup>

For the subprime RMBS and CDO transactions reviewed by the Staff, the Staff found that, at times, in both the initial ratings memoranda and addenda the vote tally was incomplete with either a generic "agreed with levels" type comment in the field for "Key variable(s) voted on" accompanying the vote tally or no indication of the vote tally at

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<sup>32</sup> In many cases, the sole documentation of the decision-making process is in the addenda section labeled "RC Outcome," with checkboxes for "RC Recommendation accepted" and "RC Outcome differed from Recommendation." In several cases where the latter box was checked, no explanatory narrative was provided.

<sup>33</sup> Email from Gus Harris, Senior Managing Director, New Products Group, Moody's, to 'SFG/Derivatives – US' listserv, Moody's (May 18, 2007, 22:16 GMT).

<sup>34</sup> See Moody's Best Practices for the Conduct of Moody's Structured Finance Rating Committees, at 5 (May 2006). See MIS-OCIE-RMBS-312, 397, 430.

all.<sup>35</sup> The Staff also found that like the initial rating committee memoranda, the majority of surveillance memoranda failed to record the voting results.

*The Staff recommends that Moody's conduct a review of its current policies and practices for documenting the credit rating process to review whether they are reasonably designed to ensure compliance with Rule 17g-2 and to address weaknesses in the policies or in adherence to existing policies that result in gaps in recording the voting in the credit rating process.*

**Moody's Response:** Moody's generally agrees with the Staff's recommendation and will continue to monitor to ensure compliance with its recordkeeping requirements.

## 8. Surveillance Practices

Under the Rating Agency Act, an NRSRO is required to disclose publicly the procedures and methodologies it uses in determining credit ratings. In addition, Section 4(d) of the Rating Agency Act states that an NRSRO must maintain adequate financial and managerial resources to produce credit ratings with integrity.

Moody's does not have written policies and procedures for the surveillance of subprime RMBS and CDO bonds, although it publishes criteria that describe the methodologies under which such bonds are monitored.<sup>36</sup> For both RMBS and CDO Moody's uses automated surveillance tools that on a monthly basis flag for review securities whose performance indicates that their current credit rating may not be consistent with the current estimated expected loss.<sup>37</sup> Aside from its monthly outlier screening, Moody's also regularly performs ratings sweeps by issuer and/or origination year, where Moody's looks at each outstanding deal individually.

Once a rated instrument is selected based on the automated surveillance tools, a Moody's surveillance analyst will further investigate the status of the transaction and present findings to a ratings committee. If the rating committee believes that a rating may need to be adjusted, then the securities are placed on review for a potential downgrade or upgrade.<sup>38</sup>

It appears that Moody's regularly performed RMBS and CDO surveillance during the exam time period. However, while Moody's publishes criteria that describe its

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<sup>35</sup> See e.g. Long Beach Mortgage Loan Trust 2006-2, MIS-OCIE-RMBS-28621-28631.

<sup>36</sup> From 2003-2007, Moody's released three comprehensive publications that detail how Moody's monitors RMBS transactions.

<sup>37</sup> For RMBS the surveillance process is based on a review of collateral performance, for CDO it is based on the ratings of the individual assets comprising the collateral pool.

<sup>38</sup> For CDO Moody's follows a very similar process; however, surveillance analyst analyze different metrics.

methodology for the surveillance of RMBS and CDO bonds, Moody's does not have internal written procedures documenting the steps staff should undertake for surveillance of RMBS and CDO bonds.

*The Staff recommends that Moody's develop RMBS and CDO surveillance policies and procedures. The Staff also recommends that Moody's conduct a review to determine if adequate resources are devoted to surveillance of outstanding RMBS and CDO ratings.*

**Moody's Response:** Moody's agrees with the Staff's recommendations and informed the Staff that it is implementing, or has implemented, global procedural and structural changes that address the Staff's recommendations. Among these policies and changes is the building out of its compliance function to facilitate surveillance policy development.

## 9. Management of Conflicts of Interest

### a. "Issuer Pay Model"/Fee Discussions

Moody's uses the "issuer pays" model, in which the sponsor or other entity that issues the security is also seeking the rating. Under Exchange Act Rule 17g-5(b)(1), it is a conflict of interest for an NRSRO being paid by issuers or underwriters to determine credit ratings with respect to securities they issue or underwrite. Section 15E(h) of the Exchange Act requires an NRSRO to establish, maintain, and enforce policies and procedures reasonably designed to address and manage conflicts of interest. Such policies and procedures are intended to maintain the integrity of the NRSRO's judgment. Avoiding a conflict of interest prevents an NRSRO from being influenced to issue a more favorable credit rating in order to obtain or retain business of the issuer or underwriter.<sup>39</sup>

In order to manage this conflict of interest, in October of 2007 Moody's established a policy to restrict analysts and their immediate managers from participating in fee discussion with issuers.<sup>40</sup> Moody's has also organized its rating group as a separate organization within a larger company.<sup>41</sup> However, Moody's does not actively monitor employees' compliance with the prohibition against analysts from participating in fee discussions.

The Staff found multiple communications that indicate that analysts are aware of the firm's fee schedules, and actual (negotiated) fees. There does not appear to be any internal effort to shield analysts from emails and other communications that discuss fees and revenue from individual issuers. In some instances, analysts discuss fees for a rating. For instance, one analyst wrote to his manager "in the past it took us 2 – 3 months to rate one [a type of deal], so I assume fees should be much higher than for typical

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<sup>39</sup> See Release No. 34-55857 and Exchange Act Rule 17g-5.

<sup>40</sup> Moody's Code of Professional Conduct (October 2007).

<sup>41</sup> In 2007, Moody's Corporation effected a separation at the corporate level between its credit rating business, Moody's, and its non-ratings product and service business, Moody's Analytics.

reperforming deal.”<sup>42</sup> Another analyst wrote to his manager asking about whether the firm would be charging a fee for a particular service, and what the fee schedule would be.<sup>43</sup> In addition, there were indications that analysts were involved in fee discussions with employees of the firm’s billing department.<sup>44</sup> The Staff is concerned that analysts could be influenced in their ratings by their awareness of the amount of fees charged to issuers.

#### **b. Business considerations in the Ratings Process**

As a result of a May 20, 2008, Financial Times article detailing a coding error in the model Moody’s utilized to rate CPDOs, Moody’s began a review by outside counsel surrounding the issue. As a result of that investigation, Moody’s reported to the Staff that a European CPDO rating/surveillance committee had knowledge that Moody’s had issued ratings on certain CPDO securities in 2006 using a model that contained a coding error.<sup>45</sup> The coding error resulted in most of those securities receiving a rating several notches higher than if the model had not contained the coding error. In January of 2007, a CPDO committee first became aware that the ratings were several notches higher than they should have been. Despite this fact, the committee agreed to continue to maintain the higher unwarranted ratings for several months until the securities were eventually downgraded for performance reasons. Members of the committee, all analysts or analytical managers, considered the rating agency’s reputation when deciding not to downgrade the securities and make the coding error public.

Moody’s recently informed the Staff that as a result of these findings, it has implemented, or plans to implement several global procedural and structural changes that address the issues identified. The Staff is still reviewing the facts related to the CPDO ratings.

*The Staff recommends that Moody’s continue to review its practices, policies and procedures to further mitigate and manage the “issuer pays” conflict of interest. In particular, the Staff recommended that Moody’s consider steps that would insulate or prevent the possibility that considerations of market share and other business interests could influence ratings or ratings criteria.*

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<sup>42</sup> Email from Gulmira Karaguisiyeva, Analyst, Term RMBS, Moody’s, to David Teicher, Team Managing Director, Term RMBS, Moody’s (May 9, 2007, 13:46 GMT).

<sup>43</sup> Email from Zhiqin (James) Huang, Analyst, Term RMBS, Moody’s, to Mark DiRienz, Team Managing Director, Term ABS, Moody’s (May 7, 2006, 13:38 GMT).

<sup>44</sup> Email from Gulmira Karaguisiyeva, Analyst, Term RMBS, Moody’s, to Joy Mayo, Manager, Middle Office, Moody’s (Aug. 23, 2007, 23:10 GMT).

<sup>45</sup> The Staff met with Moody’s and outside counsel conducting the investigation on June 27, 2008, to discuss the CPDO coding error and the progress of the investigation. Moody’s represented that the investigation into this matter will be completed in mid-July 2008.

**Moody's Response:** Moody's agrees with the Staff's recommendation and will continue to review its practices and procedures to further mitigate and manage the "issuer pays" conflict of interest.

### **c. Analyst Compensation**

Moody's has a policy that generally provides that an analyst may not be compensated or evaluated based upon the amount of revenue that the rating agency derives from issuers or issues that the analyst rates or with which the analyst regularly interacts.<sup>46</sup> While Moody's does not compensate its analysts based on the deals they rate or the ratings provided, like all employees, the amount of an analyst's bonus is tied to the overall success of the company.

### **d. Securities Transactions by Employees**

Moody's has adopted a policy to prohibit employees and their immediate family members from owning any security that is subject to a credit rating of a team on which such employees are members to guard against potential insider trading.<sup>47</sup> Furthermore, Moody's has implemented procedures to monitor employees' ownership of securities of issuers or obligors rated by groups within the company with whom an employee is not affiliated.<sup>48</sup> Managers are required to review all trades of Moody's employees that report directly to them and raise all potential conflicts of interest or violations with the Legal department or Ratings Compliance department.<sup>49</sup> The Staff found Moody's employee securities transaction program to be adequate.

*The Staff has recommended that Moody's conduct a review of its policies and procedures for managing the securities ownership conflict of interest to determine whether they are reasonably designed to ensure that its employees' personal trading is appropriate and does not violate Rule 17g-5.*

**Moody's Response:** Moody's agrees with the Staff's recommendation and will continue to review its policies and procedures for securities trading and ownership to ensure compliance with Rule 17g-5.

## **10. Internal Audit**

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<sup>46</sup> See Section 2.11 of the Moody's Code of Professional Conduct.

<sup>47</sup> See Moody's Revised Securities Trading Policy and Reporting Procedures (November 2005).

<sup>48</sup> Moody's employees must report all the securities holdings of the employee and/or members of his/her immediate family, upon initiation of employment and periodically thereafter, as well as records of securities transactions that the employee and immediate family members engage in. An employee's compliance with the transaction reporting requirement can be achieved by ensuring that his/her employer receives duplicate copies of brokerage statements and trade confirmations.

<sup>49</sup> Section 3 of Appendix A to the Revised Securities Trading Policy and Reporting Procedures (November 2005).

Historically, Moody's employed an outside firm, KPMG, to perform its audits. In addition, at least since 2006, Moody's has performed internal audits to evaluate ratings group's compliance with its best practices, its electronic storage requirements, securities trading restrictions, and the Moody's Code of Conduct.<sup>50</sup> The auditors evaluate the adequacy of implementation of internal controls designed to address these areas. The auditors perform a risk assessment to determine where to perform their audits based upon a number of factors, including the type of debt and geographic location of the group within Moody's responsible for rating an issue. For example, RMBS securities in Europe may be audited in one year, in the U.S. in the next, and in Asia in the year after that, meaning that a specific group in a particular geographic area is audited once every three years.

During the period reviewed by the Staff, Moody's conducted three internal audits related to the RMBS and CDO rating process.<sup>51</sup> The internal audit reviews discovered, among other things, certain non-compliance with document retention policies, over-reliance upon individuals for technological expertise to test software, and lack of adherence to the rating committee guidelines (inquiries about committee member conflicts, no documentation of majority vote, lack of rating committee memo, missing rating letter, empty electronic document management system ["EDMS"] folder, two models not filed on EDMS or CDO Edge, and a lack of documented re-prioritization of deal monitoring). In the Staff's opinion, the most significant finding arising out of the internal audit performed in 2006 for the U.S. Derivatives Team in Structured Finance revealed that derivative models are not formally reviewed and/or validated by management before they are posted for general use. For one deal, the analyst used a banker's proprietary model, without any form of review of the model to determine whether it was reliable or consistent with Moody's methodology. The auditors recommended that management implement a review process to periodically assess the integrity of the models used in support of the rating. Moody's was unable to demonstrate evidence of its management's follow-up on the recommendations of the auditors. The Staff believes that Moody's should be able to provide records of such follow-up as part of an examination of the internal audit record.

*The Staff recommends that Moody's review whether its internal audit functions, particularly in the RMBS and CDO ratings areas, are adequate, and whether it provides for proper management follow-up.*

**Moody's Response:** Moody's agrees with the Staff's recommendation and will review the adequacy of its internal audit functions and will develop procedures that address management follow-up.

## 11. Conclusion

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<sup>50</sup> Moody's provided no records of any audits performed prior to 2006.

<sup>51</sup> See 2006 U.S. Derivatives Monitoring Internal Audits; 2006 U.S. RMBS Internal Audit; and 2006 U.S. Derivatives Team Structured Finance Internal Audit.

The Staff intends to send a deficiency letter to Moody's outlining its findings and recommendations. The Staff will request that Moody's provide a written response within 30 days outlining any remedial action planned or already taken to address the findings and recommendations in the letter. Moody's will be asked to include in its response a timetable for implementing the proposed remedial action. The letter will also request that Moody's send OCIE a written confirmation in 12 months detailing the status of implementation of each remedial action.